

YES! Youth Employment Solutions Center

Policy Opportunities to Promote Students with Disabilities in Career and Technical Education

Authored by [Mimi Lufkin](#), [National Alliance for Partnerships in Equity](#)



Introduction

Career and technical education (CTE)¹ prepares youth and adults for high-wage, high-skill, in-demand careers in established and emerging industries.² Ninety two percent of high school students take part in CTE and thirty-eight percent concentrate in a CTE program. At the postsecondary level 8.4 million individuals participate in CTE with the intent of earning a postsecondary certificate and/or associates degree in a CTE program. CTE is delivered through a flexible system that is different in every state and community. CTE can be found in comprehensive high schools, area career centers, career academies, community and technical colleges, and four-year universities. CTE programs are organized in 16 Career Clusters and 79+ pathways (see Call-out box). CTE is known for its collaborations and support from business and industry offering students opportunities for work-based learning through job shadowing, mentoring, internships, on-the-job training, and apprenticeships. CTE prepares students to be college- and career-ready by providing core academic skills, employability skills and technical, job-specific skills.

16 Career Clusters

- Agriculture, Food & Natural Resources
- Architecture & Construction
- Arts, A/V Technology & Communications
- Business Management & Administration
- Education & Training
- Finance
- Government & Public Administration
- Health Science
- Hospitality & Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections & Security
- Manufacturing
- Marketing
- Science, Technology, Engineering & Mathematics
- Transportation, Distribution & Logistics

¹ What is CTE? <https://www.acteonline.org/why-cte/what-is-cte/>

² CTE Today! https://www.acteonline.org/wp-content/uploads/2021/02/CTE_Today-Feb2021.pdf

CTE Works for All Students

High school students involved in CTE are more engaged, graduate at higher rates and typically go on to postsecondary education. Participating in CTE is associated with a lower chance of dropping out and a higher chance of graduating on time. The overall graduate rate is 85%, compared to 94% for students concentrating in CTE programs. High school graduates who earn CTE credits are equally likely to enroll in postsecondary education as compared to the overall student population. Individuals with associate degrees in CTE fields of study can earn \$10,000 more per year than those with associate degrees in other fields.

Persons with a disability are less likely to graduate on-time, attend college or be employed compared to those without a disability. Students with a disability have a lower on-time graduation rate of 62% as compared to 81% for all students. Only 17% of people with a disability graduated college in 2017 with a bachelor's degree or higher as compared to 35% for those without a disability. 28% of people with a disability of working age are employed compared to 73% of people without a disability. These statistics are staggering and concerning. The good news is that participation in CTE improves college and career readiness for students with a disability. A student with a disability who are CTE concentrators, they have taken at least four CTE courses in high school, have better outcomes³:

- 3% fewer excused absences
- 5% more likely to graduate high school on time
- 20% more likely to be employed after graduation

Students with Disabilities Continue to be Underrepresented in CTE

Unfortunately, even with these better outcomes as an incentive for students with disabilities they are underrepresented in CTE in most states. In 2018-19 there were 8.9 million secondary students enrolled in CTE of which 980,703 were students with disabilities.⁴ Nationally, the percentage of high school students with a disability is 14.4% as compared to 11% in CTE, a significant gap considering the positive potential outcomes and the opportunities lost. More importantly, the data does not tell us about the quality of the CTE programs that students with disabilities are engaged

³ Theobald, et. al., Sept. 2017, Career and Technical Education, Inclusion, and Postsecondary Outcomes for Students With Disabilities; CALDER available at <https://caldercenter.org/publications/career-and-technical-education-inclusion-and-postsecondary-outcomes-students>

⁴ Data available from the Perkins Collaborative Resource Network at cte.ed.gov.

in. Will you find them in health care, STEM, or information technology programs where employment potential is high as well as earning potential? Or are they more likely to be found in culinary arts, childcare, or hospitality where employment opportunities are limited or wage earning potential low? These gaps in participation and lost opportunities for gainful employment are even more pronounced for students with intellectual or developmental disabilities. The stereotype threats these students experience are even more pronounced in CTE programs where their significant disability is seen as a deficit rather than finding ways to make it an asset. The dearth of research on the participation rates of students with intellectual or developmental disabilities is stunning, and in cases where some research exists the studies focus on preparation of students with disabilities for low wage work – a trend that must change.⁵

A Brief History of the Federal Role in CTE⁶

The federal role in CTE began over 100 years ago with the Smith-Hughes National Vocational Education Act of 1917. This legislation marked the first federal investment in secondary vocational education, providing funding to states for agriculture, home-making, and trade and industrial education. Over the years the funding for vocational education more than doubled and included funding for student agriculture-related organizations, marketing occupations, practical nursing, and fishery occupations. The Vocational Education Act of 1963 expanded vocational education to include “persons of all ages in all communities.” Funding was now authorized by student population rather than by field of study and included specific set-asides for academically and economically disadvantaged and disabled students. Ten percent of the funding provided to states under the Vocational Education Act of 1963 was specifically designated for states to make grants to colleges and universities, local educational agencies and other public or nonprofit private agencies and institutions to develop programs to meet the “needs of youths in economically depressed communities who have academic, socioeconomic, or other handicaps that prevent them from succeeding in the regular vocational education programs.”⁷

This was the beginning of a long history of the federal legislation funding vocational education, now CTE, with funding and priorities targeting specific groups of students, including students with

⁵ Lomardi, et.al., April 2018, Students with Intellectual Disabilities and Career and Technical Education Opportunities: A Systematic Literature Review, Journal of Disability Policy Studies Vol 29, Issue 2, 2018.

⁶ ACTE, 2019; Brief History of CTE Timeline available at <https://www.acteonline.org/wp-content/uploads/2019/06/BriefHistoryofCTE-Timeline-June2019.pdf>

⁷ Vocational Education Act of 1963 available at <https://www.govinfo.gov/content/pkg/STATUTE-77/pdf/STATUTE-77-Pg403.pdf#page=16>

disabilities. Set-asides for students with disabilities continued under the reauthorization of the Vocational Education Amendments of 1968 and 1976. In 1984, the legislation was renamed after Carl D. Perkins, a representative from Kentucky and education advocate. The Carl D. Perkins Vocational Education Act of 1984 (Perkins Act) continued the 10% set-aside for students with disabilities. The Perkins Act of 1984 coined the term “special populations” which included students with disabilities, women, minorities, single parents, displaced homemakers, economically disadvantaged, academically disadvantaged, students with limited English proficiency and men and women pursuing nontraditional careers.

The term special populations has continued to be used to include students with disabilities for each of the reauthorizations of the Perkins Act since 1984. In 1998, the term CTE was being used in the field and the reauthorization of the Perkins Act took a dramatic shift away from set-aside funding and moved to accountability and disaggregation of data by each of the special population groups. This philosophy continued in the reauthorization of 2006 and expanded dramatically in 2018.

The Perkins Act of 2018⁸⁹

Passage of the Strengthening Career & Technical Education for the 21st Century Act (Perkins V) brings the opportunity to improve the quality and accessibility of CTE for students with disabilities. Students with disabilities have historically been underrepresented in CTE due to multiple barriers affecting their ability to access high-quality CTE programs. These barriers include poverty, financial aid, transportation, lack of academic preparation and educational opportunities, language barriers, lack of support services, poor or no accommodations, low expectations and many more. To improve access to high-quality CTE for students with disabilities there must be a focus on technical skills and academic rigor, including access to upper-level courses, to improve the quality of CTE in both secondary and postsecondary education and move away from tracking students with disabilities into low-wage jobs that don’t lead to economic self-sufficiency.

If implemented well, high-quality CTE programs of study that prepare students with disabilities for high-skill, high-wage, in-demand careers can serve as an equity lever and pathway to economic

⁸ For an analysis of the special provisions in Perkins V go to https://napequity.org/wp-content/uploads/NAPE-Perkins-V-Special-Populations-At-A-Glance_v3_10-15-18_ml-2.pdf

⁹ For a summary of the equity provisions in Perkins V go to https://napequity.org/wp-content/uploads/NAPE-Perkins-V-Equity-Provisions-Summary_Final_10-15-18_ml.pdf

and social mobility. We must take the opportunity presented by Perkins V to evaluate its ability to fully support students with disabilities and fulfill its vision by closing access and performance gaps.

Perkins V continues to use the term special populations to include students with disabilities. Therefore, everywhere in Perkins V where special populations are referenced includes an opportunity to support students with disabilities whether it's in planning processes, funding priorities, program development, accountability, or research. Perkins V presents a multitude of policy levers that can be used at the state and local level to increase access and success of students with disabilities in CTE.

Perkins V Definition of Special Populations

- individuals with disabilities
- people from economically disadvantaged families, including youth and adults with low incomes
- individuals preparing for nontraditional fields
- single parents, including single pregnant women
- out-of-workforce individuals
- English learners
- people experiencing homelessness
- youth who are in, or have aged out of, the foster care system
- youth with a parent on active duty in the military

Equity Policy Levers at the State Level

State Plans

To receive Perkins V funding States must submit a state plan that outlines how it will respond to all the provisions in the Act. State plans are developed in consultation with members and representatives of special populations. Individuals with disabilities are also called out specifically

in the State plan consultation provisions. State plans for 2020-2023 are available on the Perkins Collaborative Resource Network.¹⁰

State-Level Funding

States receive Perkins V funding, called the Basic State Grant, from the U.S. Department of Education, Office of Career, Technical and Adult Education (OCTAE). In FY 2021, OCTAE allocated over \$1.3 billion to States for CTE programs.¹¹ The State allocation, or Basic State Grant, is used to support activities in three categories: Local formula funds (85%); State Leadership funds (10%) and State Administration funds (5%).

Reserve Fund

Fifteen percent of a State's Basic State Grant can be reserved and used to support programs in areas with disparities or gaps in performance on the core indicators in the Perkins accountability system. This could include schools where performance of students with disabilities is below all students' performance on any of the accountability measures.

State Institutions Set-Aside

Two percent of the Basic State Grant must be used to support students in State institutions, including educational institutions that serve students with disabilities.

Special Populations Recruitment

When States receive their state allocation, they must set-aside no less than .1% of the Basic State Grant for the purposes of conducting recruitment activities to increase the participation of special populations, including students with disabilities in CTE.

State-Level Accountability

Perkins V continues to build on the accountability system that was developed under the Perkins reauthorization in 1998. The system includes core indicators of performance; state-level targets that are determined by States in their state plans; disaggregation of data by gender, race/ethnicity, and special population status; and reporting requirements. When States set their State Determined Levels of Performance (SDLP) the targets must make meaningful improvement of performance for

¹⁰ Perkins V State Plans for 2020-23 are available at <https://cte.ed.gov/dataexplorer/>. State plan revisions were due on May 21, 2021.

¹¹ FY 2021 Perkins State Allocations available at <https://cte.ed.gov/grants/state-allocations>

students with disabilities and the target must be higher than the past two years performance. Requirements for closing equity gaps for special populations, including students with disabilities is a central tenant of the system.

Concentrator Definition

Perkins V uses the term “concentrator” to define who is included in the accountability system. Concentrator at the secondary level is a student who has completed at least two courses in a single CTE program or program of study. At the postsecondary level, a concentrator is a student enrolled in a CTE program who has earned at least 12 credit hours or completed such a program if the program encompasses fewer than 12 credits or the equivalent in total. All the core indicators measure concentrators who have attained the indicator.

Secondary Indicators

- Graduation
- Academic success on state assessments (Mathematics, English/Language Arts)
- Placement in -
 - Post-secondary education or advanced training
 - Military service
 - Service program participation
 - Peace corps volunteer
- Program quality (at least one)
 - Graduates attained a postsecondary credential
 - Graduates with articulated credits
 - Graduates who have participated in work-based learning
 - Other measure of student success
- Concentrators in CTE programs that lead to nontraditional fields

Postsecondary Indicators

- Placement (second ¼ after completion)
 - Remain enrolled in postsecondary education
 - In advanced training
 - Military service
 - Service program participation

- Peace Corps volunteer
- Postsecondary credential attainment during participation or within one year of program completion
- Concentrators in CTE programs that lead to a nontraditional field

Data Disaggregation

States are required to disaggregate data by gender, race/ethnicity, each special population group and migrant students. Using these data States conduct an equity gap analysis when developing their state plan for the purposes of setting appropriate SDLPs. States also must understand which of the disaggregated groups are not meeting the SDLPs or are lagging all student performance. This equity gap analysis is used to prioritize how state funds are targeted for professional development and technical assistance to help local education agencies (LEAs) improve their performance. States must also report the participation rates, concentrator rates, and performance rates on each of the core indicators for each of the disaggregated groups in their Consolidated Annual Report that is submitted to OCTAE.¹²

State Support for the Equity Gap Analysis –

Data Access is the Key!

One of the most important roles a state education agency can play in supporting LEAs to be able to close equity gaps is by providing disaggregated data in a user friendly format. The Maryland State Department of Education has created a set of data dashboards for their LEAs to use when conducting their CLNA. These dashboards are truly a best practice in data transparency and true to the requirement in Perkins V they are publicly available at <https://www.mdctedata.org/>

Improvement Plans

States must meet at least 90% of their SDLP on any one of the measures for all students every year. If that threshold is not met, States are required to conduct an analysis of the

¹² State plans and consolidated annual reports are available on the Perkins Collaborative Resource network at <https://cte.ed.gov/>

performance disparities or gaps between all students and each of the disaggregated groups, including students with disabilities, and identify actions that will be taken to address the gaps in an improvement plan that is submitted to OCTAE. States will be sanctioned (funds withheld) if they fail to implement an improvement plan or fail to meet at least 90% of a SDLP for any core indicator for two consecutive years after being identified for improvement. While under improvement plan status States are not eligible to adjust performance levels.

State Leadership Activities

States are required to use 10% of the Basic State Grant to conduct state level activities that support the purposes of the Perkins Act. The Act includes both required and permissible uses of funds that address special populations and students with disabilities specifically.

The **required** uses of funds include:

- Serving individuals in State institutions, such as educational institutions serving students with disabilities
- Recruiting, preparing, or retaining CTE instructors and support staff. This could include preparing CTE instructors and support staff with the professional development on how to provide accommodations for students with disabilities.
- Technical assistance. This technical assistance could be with LEAs on strategies to support students with disabilities
- Reporting on the effectiveness of funds in reducing disparities or performance gaps. This report will include how students with disabilities are faring on the SDLPs and how effective funds have been in improving students with disabilities performance.

The **permissible** use of funds include:

- Professional development for serving special populations, including students with disabilities
- Eliminating inequities in student access to high quality programs of study
- Rewarding improvement on closing equity gaps
- Support for out-of-school adults and youth

State's Agency Collaboration is a Must When Supporting LEAs Working to Increase Access to CTE

The Delaware Department of Education in partnership with NAPE embarked on a project in 2017 to increase the participation and success of students with disabilities in CTE by implementing a comprehensive professional learning program for teams of educators from school districts. The project, PIPEline to Career Success for Students with Disabilities, included a leadership team of representatives from the Delaware Department of Education, Divisions for CTE and Exceptional Children Resources; Delaware Department of Labor, Division of Vocational Rehabilitation; Delaware Health and Social Services, Division for the Visually Impaired and the Division of Disabilities Services. These partners truly collaborated by sharing in financial responsibility, commitment of staff time, and dedication of agency resources to support the effort. Learn more about PIPEline at <https://napequity.org/pipeline-career-success-students-disabilities/>.

Equity Policy Levers at the Local Level

Comprehensive Local Needs Assessment

The Comprehensive Local Needs Assessment (CLNA) is the strongest equity lever for students with disabilities in Perkins V. The CLNA is required every two years by every LEA receiving Perkins funds from the state. The CLNA first requires that an LEA conduct an equity gap analysis of each of the disaggregated groups (gender, race/ethnicity, each special population group, and migrant students) for both their participation in CTE and performance on the core indicators of performance. Although not specifically named in the law, States have incorporated a root cause analysis in their CLNA processes to ensure that LEAs identify the barriers that are causing the gaps in participation or performance. The CLNA requires that LEAs evaluate the strategies needed to overcome the identified barriers to access and performance for special populations, including students with disabilities, and provide programs to enable them to meet the local levels of performance. The law specifically requires that activities be provided to prepare special populations, including students with disabilities, for high-skill, high-wage, or in-demand industry sectors or occupations that lead to self-sufficiency. Lastly, the CLNA must be completed in consultation with key stakeholders, including students with disabilities and providers who serve them.

Local Application

The local application contains a description of the results of the CLNA and how the LEA plans on responding to these results. The local applications provisions in Perkins V that refer to students with disabilities include:

- contains a description of how special populations will learn about CTE course offerings
- information on approved programs of study including a description of how the eligible recipient will—provide activities to prepare special populations for high skill, high wage, or in-demand occupations that will lead to self-sufficiency; and provide equal access for special populations and ensure that special populations are not discriminated against.
- A description of how the eligible recipient will address disparities or gaps in performance in each of the plan years, and if no meaningful progress has been achieved prior to the third program year, a description of the additional actions to be taken to eliminate those disparities or gaps.

Local Uses of Funds

Perkins V includes several required uses of funds that could support students with disabilities:

- Expand the use of Perkins funds to grades 5-8 for career exploration and career development activities and programs
- Provide provisional development for teachers, principals, school leaders, administrators, and career and guidance counselors, or paraprofessionals which may include:
 - supporting the implementation of strategies to improve student achievement and close gaps in student participation and performance in CTE;
 - providing appropriate accommodations for individuals with disabilities; and
 - disseminating frameworks to effectively teach students, including a particular focus on students with disabilities, which may include universal design for learning, multi-tier systems of supports and positive behavioral interventions and support.
- Plan and carry out elements that support the implementation of programs of study and student achievement of the local adjusted levels of performance which may include—
 - initiatives that provide students with transition-related services, including the Individuals with Disabilities Education Act;
 - programs and activities that increase access, student engagement, and success in science, technology, engineering, and mathematics fields (including computer

science) for students who are members of groups underrepresented in such subject fields;

- CTE options, in a school or other educational setting for adults or out-of-school youth to complete secondary school education or upgrade technical skills; and
- efforts to reduce or eliminate out-of-pocket expenses for special populations participating in CTE, including those participating in dual or concurrent enrollment programs or early college high school programs, and supporting the costs associated with fees, transportation, childcare, or mobility challenges for those special populations.

How One School District Increased the Participation of Students with Disabilities in CTE

A small rural high school, Laurel School District, participated in the first cohort in the PIPEline to Career Success for Students with Disabilities project in Delaware. After digging into the disaggregated data dashboards provided in the PIPEline training the team identified very low to no participation of SWD in many of their CTE programs. The team conducted their root cause action research by interviewing students and doing an analysis of the alignment between IEP career goals and CTE program participation. They uncovered a significant mismatch. After providing counseling and hand scheduling with these students they were able to almost double the participation rates of SWDs in CTE (72 students to 133). They have continued to grow this success and are now discovering increased retention rates of SWDs in CTE as a result of the relevance they are experiencing to their career goals!

Local Level Accountability

Perkins V maintains and strengthens the local accountability provisions that support students with disabilities by requiring LEAs to complete the CLNA and report publicly their performance on the core indicators of performance. Accountability at the local level mirrors the state-level accountability requirements using the same core indicators of performance (see State-Level Accountability above) and the same requirements for the disaggregation of data for the CLNA and the local report. LEAs are required to negotiate performance targets with the State or accept the SDLP as their target and are held accountable to meeting those targets for each of the special population groups annually.

Local Report

The local report must include the actual levels of performance for all CTE concentrators; for each of the disaggregated subgroups; and by CTE program or career cluster if program level data is not practical. In addition, the local report must identify and quantify any

disparities or gaps in performance on the SDLPs between any subgroup and the performance of all CTE concentrators. The local report must be made available in a variety of formats, including online, to students, parents, educators and the public and in a format understandable by all these audiences.

Local Improvement Plan

The local improvement plan provisions mirror the state improvement plan provisions. Improvement plans at the local level are triggered when an LEA does not meet 90% of its target for any of the core indicators. The local improvement plan must include an analysis of the performance disparities or gaps and actions that will be taken to address such gaps. If an LEA fails to meet at least 90% of their target for any core indicator for two consecutive years after being identified for improvement, then sanctions are triggered.

By using these four policy levers – the CLNA, the local application, the local required uses of funds, and the local accountability measures – you have a tremendous opportunity to build a CTE system that supports students with disabilities’ access and success. Don’t underestimate your ability to advocate for these services and utilize your students, parents, and community members to advocate with you.

Recommendations

The potential for impact at the systemic, policy, program and student level using all the equity provisions in Perkins V is significant. However, it takes more than policy provisions in a piece of federal legislation to drive the kind of change needed to increase access and success for students with disabilities in CTE, especially for those with more significant disabilities. All educators within their sphere of influence, whether in a state administrative role or in a classroom, must find the opportunities in CTE where students with disabilities can thrive. Most importantly we must eliminate the stereotypes that limit our ability as educators to create learning environments where students with disabilities alongside their peers can be successful and attain marketable skills in a career path that leads to a self-sustaining wage. The following recommendations are the initial steps to leveraging Perkins V – the rest is up to you!

Funding

- Consider using the 15% reserve fund to encourage innovative CTE programs for students with disabilities that include cross-agency collaboration and aligned investment of ESSA, IDEA, WIOA, and Perkins
- Advocate for additional state leadership funds beyond the set-aside for outreach to students with disabilities and their families about the opportunities CTE holds for them.
- Utilize the State Institutions set-aside to fund programs that demonstrate best practices for connecting students with intellectual and developmental disabilities to CTE programs that lead to a marketable skill. Incentivize these best practices across all LEAs using the 15% reserve fund.

Accountability

- Ask to see the State's/Local's equity gap analysis and determine if the participation rate of students with disabilities in CTE is representative and if they are meeting the performance measures – is there a gap?
- When conducting an equity gap analysis do not consider students with disabilities as a single group. If available, disaggregate your data by disability type. Are you only serving students with high incidence disabilities and students with intellectual or developmental disabilities are not participating? You may find a gap within the students with disabilities group that is significant and needs to be addressed.
- If your State/Local performance has triggered an improvement plan get involved in the planning and implementation to help close the gap for students with disabilities.
- Read your State/Local improvement plan to determine the status of improvements for students with disabilities. Provide comments to the appropriate agency if you feel the plan does not adequately address the needs of students with disabilities.
- Don't forget to involve students in the process!

State Activities

- Read your State's plan and see what it says about how students with disabilities will be supported in CTE.
- Make recommendations to improve the plan whenever revisions are possible.
- Advocate for all the ways that State Leadership funds can be used to support students with disabilities such as professional development that brings special education and CTE teachers together.

- Provide incentives and recognize LEAs that have been successful in increasing students with disabilities access and success in CTE.
- Support state-wide initiatives that focus on improving access and success for students with disabilities in CTE such as targeted professional development, incentive grants, or collaborations with business, industry, and government to provide work-based learning opportunities for students with disabilities.
- Ensure that the state leadership activities being implemented consider the multiple types of students with disabilities and their diverse accommodation and modification needs to ensure that educators are not implicitly being encouraged to only serve students with the mildest disability.

Local Activities

- Use the Comprehensive Local Needs Assessment as a tool for program improvement with a particular focus on students with disabilities.
- Hold LEAs to rigorous expectations regarding their gap analysis and local Perkins plans for students with disabilities.
- Require cross-agency collaboration to support students with disabilities participation in CTE and work-based learning.
- Ensure that CTE teachers develop expertise in accommodations and universal design for learning for students of all disability types.
- Implement policies and practices with CTE and Special Education teachers that support collaboration and results in students with more significant disabilities receiving the support they need to be successful in a CTE program. These strategies can include shared planning time, co-teaching in a CTE setting, using para-professionals to provide one-on-one assistance; and providing assistive devices and technology that makes tools and equipment accessible.