

STRATEGIES FOR SERVING SPECIAL POPULATIONS STUDENTS IN CTE

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STRATEGIES FOR SERVING SPECIAL POPULATIONS STUDENTS IN CTE

Introduction

Students across the spectrum of special populations face many educational challenges and often do not enter or complete career and technical education (CTE) programs. To focus attention on improving participation, retention, and completion rates among special populations students, The National Center for College and Career Transitions (NC3T), under the direction of the Bureau of Career Technical Education (BCTE) of the Pennsylvania Department of Education (PDE), convened a Special Populations Working Group to help target identification and gathering of best practices that positively impact students from special populations.

In the most recently enacted version of the federal Perkins Act (Perkins V) to support state and local CTE, the definition of “special populations” was slightly expanded to include youth connected to foster care and individuals with parents on active duty in the armed services.

Under Perkins V, students from “special populations” include:

1. individuals with disabilities;
2. individuals from economically disadvantaged families, including low-income youth and adults;
3. individuals preparing for non-traditional fields;
4. single parents, including single pregnant women;
5. out-of-workforce individuals;
6. English learners;
7. homeless individuals described in section 725 of the McKinney-Vento Homeless Assistance Act (42 U.S.C. 11434a);
8. youth who are in, or have aged out of, the foster care system; and
9. youth with a parent who is a member of the armed forces and is on active duty.

Many students identify with more than one special populations category, such as a student with a disability who is in a non-traditional field.

Perkins V Comprehensive Local Needs Assessment and Performance Indicator Data

Perkins V requires that local eligible recipients conduct a comprehensive local needs assessment (CLNA) and update it on a biennial basis. The CLNA is considered “the foundation of Perkins V implementation at the local level.” Guidance from PDE about how to conduct the CLNA can be found on page 71 and 72 in the [Perkins Local Applications Guidelines](#) .

Local eligible recipients must work with key stakeholders to conduct a comprehensive evaluation of their CTE systems, and to use data to identify areas for targeted improvement that could lead to “increased opportunities for student success.” The CLNA analysis process requires CTE administrators to review and consider performance of students from special populations.

Additional information about the Perkins CLNA prepared by Advance CTE and ACTE can be found in this [Guide for State Leaders](#).

The CLNA must report on:

1. Performance on federal accountability indicators;
2. Alignment to labor market needs;
3. Scope, size, and quality of programs offered;
4. Progress toward implementing programs and programs of study;
5. Recruitment, retention, and training of faculty and staff; and
6. Progress toward improving access and equity.

Under Perkins V, states are required to report on specific core indicators of performance. Pennsylvania reports on the following core indicators:

1S1: Four-Year Graduation Rate

1S2: Extended-Year Graduation Rate

2S1: Academic Proficiency in Reading/Language Arts

2S2: Academic Proficiency in Mathematics

3S1: Post-Program Placement

4S1: Non-traditional Program Concentration

5S1: Program Quality – Attained Recognized Postsecondary Credential

5S4: Program Quality for Skill Attainment on NOCTI-NIMS

Perkins V Performance Indicator Data is now disaggregated by the special populations sub-groups to more effectively identify and address performance gaps.

Special Populations Working Group

The Special Populations Working Group is composed of 20 members who serve in administrative or instructional roles at Career and Technology Centers (CTCs) located across the six geographic regions in Pennsylvania and different types of communities (urban, suburban, small town). The group convened for four virtual meetings from November 2020 to June 2021.

The Special Populations Working Group focused its efforts on identifying challenges associated with meeting the needs of CTE students from special populations groups and potential

strategies to address those challenges. For time purposes and to address similar needs of students, it combined some of the special populations categories.

Consolidated Group: Students Facing Economic Challenges

1. Individuals from economically disadvantaged families, including low- income youth and adults
2. Out-of-workforce individuals
3. Homeless individuals described in section 725 of the McKinney-Vento Homeless Assistance Act (42 U.S.C. 11434a)

Use of this Working Report

This 2020-21 report on serving special populations students in CTE is a summary of effective strategies identified by the working group. It is not meant to serve as an exhaustive list of strategies. Rather, it captures the professional insight and in-the-field knowledge working group members shared during the four meetings. It represents a jumping off point for further discussion on how best to meet the needs of CTE students across special populations in Pennsylvania and the resources needed to do this.

The strategies identified in this report may be adapted for posting on electronic platforms such as the BCTE website, the PACTEResources.com website (administered by PACTA) and other CTE-related websites in Pennsylvania.

Section 1: Cross Cutting Strategies to Serve Special Populations Students

Many strategies for serving special population students in CTE cut across multiple categories of special populations as defined in Perkins V. That is, these strategies can be implemented to meet the needs of students across special population categories because they address some universal needs. The Working Group refers to these strategies as *Cross Cutting Strategies*. They include strategies related to:

1. Data collection and analysis;
2. Professional development;
3. Collaboration and communication between CTCs and sending schools; and
4. Early interventions.

Strategy 1A. Collect and analyze data to drive change and monitor student progress.

- a. Data for the sake of data serves no real purpose. It is not enough to gather data to analyze and identify achievement gaps. **After the analysis, educators need to implement strategies that directly address the underlying factors contributing to the gaps.** This process then sets the stage to evaluate if those strategies are effective.
- b. **To meet the specific needs of special population students, educators should analyze student performance data disaggregated by the special populations subgroups identified in Perkins V.** This analysis should be done school-wide and by program area and include a comparative analysis with data on non-special population students. *(When completing such analysis, however, educators need to be cautious about drawing faulty conclusions from the data. There may be a misinformed tendency to blame low scores on a high number of special populations students participating in a particular program. This could lead to a negative stigmatization of these students.)*
- c. **Educators should collect a variety of data, including but not limited to:**
 - NOCTI pre- and post-data
 - Academic performance (Keystone assessments, academic grades)
 - Attendance
 - Long-term placement in work-based learning programs like internships and/or cooperative education (co-op)
 - Behavior (suspensions/disciplinary actions)
 - Engagement (time-on task)

- d. **Data analysis is a skill that needs to be taught. Staff at high schools and CTCs should participate data analysis training.** Training should address how to collect and analyze data to help identify achievement gaps, conduct root-cause analysis, and how to then implement interventions based on this analysis. Set expectations for when and how data will be collected and analyzed.
- e. **CTCs should provide instructors time to conduct data analysis, and to discuss it and collaborate with colleagues to devise intervention strategies.**
- f. **Schools benefit from securing teacher buy-in for collecting and analyzing data to guide instruction.**
- g. **CTCs should share data analysis findings with sending schools and other stakeholders as appropriate.** Make the analysis easy to access and read. When CTCs share data, it can validate their reasoning for needing resources to serve students or deciding to implement certain strategies.
- h. **CTCs and schools should administer student surveys and analyze the data to capture and validate students' voices about school and their experiences.**

Strategy 1B. Provide professional development to instructors that educate them about the unique needs of some special populations students and teaches them effective instructional strategies to best serve these students.

- a. **CTS should maximize resources and time to provide focused and relevant professional development.**
 - Inform faculty of the special populations represented at the CTC and compare their data to state averages.
 - Consider collaborating with sending schools to provide professional development on topics relevant to both CTE instructors and academic teachers. Or, if a particular area of training already is offered at a sending school, find out if instructors from the CTC can utilize it.
 - Take advantage of peer-to-peer learning. Have instructors share with colleagues what they learned at a professional development session. If an instructor has experience in a particular area that would benefit other teachers, then have that instructor train them.
 - Expand opportunities for online training.
 - Establish accountability measures for making sure what is presented in professional development is then applied in the classroom. How often will a strategy be used? How will it be measured/monitored?

Strategy 1C. CTCs and sending schools collaborate and communicate to provide needed services to students in a consistent and streamlined manner.

CTCs and sending schools both are responsible for providing students with a high-quality educational experience in which their needs are addressed. **Clear communication between the CTC and the sending school about the roles and responsibilities assumed by each school, data sharing, and established procedures and points of contact are critical.**

Strategy 1D. Intervene early and often to meet students' needs.

CTCs can address barriers to learning among special populations students by proactively working with students. When CTCs intervene early, they can help head off a more serious learning challenge. In addition, following up with students after interventions is important to monitor student progress and determine if additional strategies are warranted, and support student engagement.

Promising Practices Profiles and Other Resources: Cross Cutting Strategies

[Venango Technology Center: Multiple Tiered System of Support \(MTSS\)](#)

Venango Technology Center (VTC) uses MTSS to proactively implement interventions for students who face barriers to learning.

[SUN Area Technical Institute: Student Awareness Team](#)

The Student Awareness Team identifies students who are struggling and proactively provides resources and support to address their specific barriers to learning.

[Lancaster County Career & Technology Center, Lancaster County Public Sending Schools and Lancaster/Lebanon IU13: Strengthening Partnerships between Sending Districts, CTCs, and IU13 to Support CTE Students with Diverse Needs](#)

Lancaster County Career & Technology Center, its sending school districts, and the Lancaster/Lebanon Intermediate Unit 13 focused on improving their collaboration and communication practices so that they could better serve students with diverse needs. As part of this process, they delineated specific responsibilities among themselves and increased their transparency when working together.

[Susquehanna County Career & Technology Center: Early Intervention to Address Student Performance Concerns](#)

Instructors use alert forms to notify the student, the parents, the counselor, and the executive director if a student's grade dips below 75% in a class. This early-intervention approach addresses the needs of all students facing barriers to learning, including those from across the spectrum of special populations.

[Resource Guide: Publications and Electronic Resources Relating to Special Populations](#)

This document includes a collection of resources focused on serving special populations students in CTE.

[Video: SUN Area Technical Institute - Student Awareness Team Video](#)

The SUN Tech Learning Support Teacher provides details on how SUN Tech identifies students in need and focuses on the early implementation of services to address those needs.

Section 2: Individuals with Disabilities

About 29 percent of secondary students participating in CTE in Pennsylvania are identified as individuals with disabilities. (Note: Special populations participant data provided throughout this working report is from the 2020 Pennsylvania Consolidated Annual Report (CAR).) These students can thrive in CTE programs when they receive the support and resources they need. Many of these students benefit from proactive interventions that aim to ease educational transitions for them, build on their skills, abilities, and interests, and directly address any barriers to learning, which may involve academic, social-emotional, or other challenges.

Strategy 2A. Emphasize the importance of and implement practices to support appropriate program placement so that students are well-positioned to enroll in programs that best align with their interests and skills.

For many students with disabilities, achieving success in a CTE program starts with enrolling in a program that is a “good fit” for them. A “good fit” program is one that aligns with their interests and skills and prepares them for postsecondary success be it in education, training, or direct entry into the workforce.

Many educators find that helping students take ownership of their enrollment decision is a powerful strategy. To be able to do this, prospective students need to be able to fully assess whether a program is a good match for them. Specific practices that could be implemented to help students make their decisions include:

- a. Tours of specific CTE programs so that students can see what a class is like in action.
- b. Informal assessments during visits and tours. Instructors observe prospective students trying out a class and provide feedback on their strengths and areas in need of improvement.
- c. Interviews with prospective students to discuss career goals.

Strategy 2B. Provide transition services for students enrolling in the CTC.

Schools should follow the CTC admissions policy, and once the student is admitted, the IEP team should meet to determine appropriate services to ensure the student achieves Free and Appropriate Education. Students with Individualized Education Programs (IEPs) benefit from supports that help ease their transition to the CTC. These services require coordinated planning and communication between the CTC and the sending school, as well as early and sustained outreach to the students and their families. CTCs and sending schools should “frontload” these conversations - start the conversations as early as possible, and at least in the spring before the students start at the CTC in the fall.

Specific practices that could be implemented to help facilitate the transition for students include:

- a. Prior to the student starting the CTE program, the sending school shares the student’s IEP with the CTC, and CTE instructors and learning facilitators attend IEP meetings if possible. These practices can help ensure the IEP is written so the Specially Designed Instruction (SDI) is relevant to the program requirements and certifications. (Match up SDI with day-to-day task list in the program of study.)

- b. Give students and parents the opportunity to meet with CTC learning facilitator staff prior to enrollment so that they know who to go to for support and are familiar with the resources available to them.
- c. Provide an opportunity for students and parents to meet with their CTE instructor before the student begins the program. This allows them to become familiar with the instructor. The instructor can explain the program and expectations to them and address any questions or concerns.

Strategy 2C. Provide comprehensive planning for students for postsecondary success.

The transition to educational and employment opportunities after high school marks an important step for all students. **For students with disabilities, focused support and resources can help them make a successful transition to further education, training, or work experiences that best align with their goals, strengths, and needs.** Comprehensive planning may include strategies such as:

- a. Provide transition clinics which bring together students, their families, key school staff, and relevant community stakeholders to discuss next steps with students and the resources they will need to take those steps.
- b. Help students set specific career path and transition goals that are focused on postsecondary educational programs and/or realistic employment opportunities.

Strategy 2D. Focus on coordination and collaboration between CTE instructors, special education instructors, and learning facilitator staff to ensure students' needs are met and accommodations are made to best help students achieve success.

To provide students with disabilities the services and resources they need and are detailed in their IEPs, the CTE instructors, special education instructors, and learning facilitator staff should communicate about the classroom assignments and expectations.

Practices that support this strategy include:

- a. CTE instructors sharing lesson plans and assessments with learning support staff ahead of time.
- b. Regular meetings (or communications) to discuss what is or is not working for the student.
- c. Agreement on what in-class services will look like and how they can best be implemented.

Strategy 2E. Design and differentiate instruction to meet varying needs and build on individual strengths.

CTE instructors need to use teaching strategies that address the different learning styles and abilities of their students. They should also work with the sending schools to ensure that the SDI matches up with the program task list.

Strategy 2F: Consider ways to expose students with significant cognitive disabilities to career options and CTE programs in a safe and meaningful manner.

Focus on how best to meet the needs of students with significant cognitive disabilities to learn about a range of career options and participate in CTE programs, taking into consideration safety precautions, interests, and skills.

Strategy 2G. Provide professional development to both CTE instructors and learning facilitators on how to best meet the needs of students with disabilities.

Professional development should focus on how to:

- a. **Implement SDI in CTE and build buy-in for doing so.** SDIs are often written and developed for general education application, but they would better serve students with disabilities if they also took into consideration their CTE programs.
- b. **Better understand the legal requirements of special education in CTE.**
- c. **Read and understand IEPs so that they can plan and deliver instruction that takes into consideration the learning goals for students and what services and resources should be provided to meet those goals.**
- d. **Differentiate instruction and implement accommodations to meet the needs of all students.**

Strategy 2H. Prioritize consistent and focused communication and collaboration between CTCs and other stakeholders who play an important role in helping students with IEPs be successful.

Schools and CTCs should follow CTC admissions policy. Once students are admitted to the CTC, the IEP or 504 team should convene to discuss supports to ensure FAPE for students with disabilities. Every student with a disability has a case manager at the sending school with whom the CTC should contact to obtain information about accommodations. Sending schools may need guidance in understanding what CTE programs entail so that they can help students select appropriate programs. CTCs and sending schools both play a role in providing services to students with disabilities. Clear communication between the CTC and the sending school about the roles and responsibilities assumed by each school, data sharing, and established procedures and points of contact are critical. Together, sending schools and CTCs can identify students' needs, monitor their progress toward achieving their learning goals and help students plan for their postsecondary transition without duplicating efforts or allowing services and needs to go unmet.

- a. **Parents** – CTCs should conduct outreach to parents early on, during a student's enrollment in a CTE program, and throughout their time at the CTC.
- b. **Students** - As Strategy 1 states, by engaging students in their decision making and empowering them to take ownership for their learning goals and needs, CTCs can help students advocate for themselves and be successful. A designated staff member can meet regularly with students with disabilities to discuss their progress, listen to their feedback, and identify any issues with which they may need help.
- c. **Employers, postsecondary institutions, and community service providers** – CTCs must develop and sustain working relationships with these stakeholders so that together

with students and their families, they can map out viable, appropriate, and supportive postsecondary options for students with disabilities.

Strategy 2I. Monitor student engagement.

Student engagement is linked to student success in school. **To monitor engagement, CTCs can use attendance data and time-on-task data.** Time-on-task can be determined by monitoring student progress on the program task list.

Promising Practices Profiles: Individuals with Disabilities

[Lenape Technical School: Using Work Samples to Assess Prospective Students with Disabilities](#)

Instructors developed work samples to administer to prospective students with disabilities to help students determine if a particular CTE program is a good fit for them.

[SUN Area Technical Institute: Early Intervention to Support Students with Disabilities](#)

SUN Tech provides resources and support to students with disabilities before and during their enrollment. The goal is to help them make a smooth transition from their sending schools to the CTC by helping them find a program that best meets their interests and abilities and by making sure the learning support services they need to be successful are in place from the moment they start at SUN Tech.

[A.W. Beattie Career Center: Northern Area Transition Fair Supports Students with Disabilities](#)

In collaboration with its nine sending and sponsoring school districts, A.W. Beattie Career Center hosts an annual “Transition Fair” geared towards students with disabilities who may need support transitioning from high school to postsecondary education, employment, or independent living.

[York County School of Technology: Linking Life Skill Students with CTE Programs that Align with Their Interests and Skills](#)

Life skill students from 14 school districts can attend York Tech in 11th grade and experience six different technical programs for three weeks at a time. The students then select one of the technical programs to enroll in for their senior year with the goal of developing job-ready skills and obtaining meaningful employment.

[Video: Lenape Technical School and SUN Area Technical Institute - Supporting Students with Disabilities in CTE](#)

Practitioners from each CTC discuss how they support students with disabilities as they consider whether a CTE program is a good fit for them.

[Lehigh Career and Technical Institute: Building Chairs for Students with Autism](#)

Students in the service occupations cluster building trades maintenance program and students in the mechatronics program collaborated with the Carbon Lehigh Intermediate Unit on a problem-based learning project- to design and build a better classroom chair for students with autism.

[Erie County Technical School: Student Success Form](#)

Students with disabilities who are applying to Erie County Technical School (ECTS), their parents, and their case managers complete a student success form to help inform families of the expectations and requirements for CTE programs at ECTS.

[Delaware County Technical Schools: Skill Alignment for CTE Programs](#)

Delaware County Technical Schools created skill alignment charts for each CTE program that document the math and literacy skills integrated into programs as well as the physical considerations and essential skills for each program.

[Northern Westmoreland Career & Technology Center: Facilitating Special Education Services](#)

To support students, the CTC partners with the Westmoreland County Intermediate Unit to employ a Special Education Facilitator. The facilitator provides learning support to students with IEPs and coordinates services between four participating high schools.

[Central Westmoreland Career and Technology Center: Assessing Student Interest and Skills to Guide Program Placement](#)

Students with disabilities who will be attending Central Westmoreland Career and Technology Center complete a career interest inventory and talent assessment program so that they can make informed decisions about which CTE program might best align with their interests and skills.

[Admiral Peary Area Vocational Technical School: NOCTI Assessment Support for Students with Disabilities](#)

Students with disabilities are offered a range of support services to help prepare for the NOCTI assessments. These ongoing services are aligned to meet the specific learning needs of students.

[Upper Bucks County Technical School: NOCTI Preparation and Support for Students with Disabilities](#)

All students are provided multiple levels of support to help them prepare for the NOCTI exams. Students with disabilities are given additional assistance as required and needed to help them succeed on the tests.

[Western Montgomery Career and Technology Center: Improving NOCTI Scores](#)

To prepare students for the NOCTI assessment, administrators and instructors conduct data analysis to identify areas in need of improvement, set student-specific learning goals and provide ongoing support to students. Additional support is provided to students with disabilities.

[Cumberland Perry Area Vocational Technical School: Improving NOCTI Scores](#)

The faculty implements data-driven instruction and review strategies to help ready students for end-of-program assessments.

[Franklin County Career & Technology Center: Support for Students with Disabilities](#)

Instructors and instructional aides support students with disabilities as they prepare for the NOCTI exam. Instructors receive professional development that focuses on research-based teaching strategies to help meet the diverse needs of students.

[Beaver County Career and Technology Center: Special Education Live Binder](#)

Beaver County Career and Technology Center created an online reference site to organize and give access to documents that may be needed by its special education students and their families.

[Beaver County Career & Technology Center: Protocol to Assure Students with Disabilities Succeed in CTE Programs](#)

Administrators and staff created and implemented a Special Education Communication Protocol that addresses CTE and local education agency responsibilities to ensure that students with disabilities or 504 plans receive the necessary services to succeed. The plan documents a protocol of recruitment, placement, and support for these students.

[Lawrence County Career and Technical Center: Academic Support for Students with Disabilities](#)

The roles of the four special education teachers were reassigned to allow for the re-establishment of inclusion and co-teaching, in addition to promoting teacher and classroom concentrations in 1) Replacement / parallel Learning Support English Classroom, 2) Replacement / parallel Learning Support Math Classroom, and 3) Specialized differentiated Learning Support Academic Support Classroom. These changes allowed the special education department teachers to each serve in skilled knowledge roles. The CTC also implemented new instructional and assessment policies and practices to better serve students with disabilities.

Section 3: Students Facing Economic Challenges

This is an umbrella category that addresses the needs of students from three special populations groups:

1. Individuals from economically disadvantaged families, including low- income youth and adults. About 47 percent of secondary CTE participants enrolled in CTE in Pennsylvania are in this category.
2. Out-of-workforce individuals. (No secondary CTE participants meet this definition.)
3. Homeless individuals described in section 725 of the McKinney-Vento Homeless Assistance Act (42 U.S.C. 11434a). Approximately 2 percent of secondary CTE participants are identified as homeless.

Students from economically disadvantaged families and/or who are experiencing homelessness may benefit from strategies and resources designed to address barriers to learning. For many of these individuals, basic and pressing needs – such as food, housing, and transportation – must be addressed to help them be successful in school. Because these needs directly impact educational performance, schools should demonstrate an awareness and understanding of the link between economic hardship and student progress.

Note: No high school CTE students meet the qualification of “out-of-workforce individuals,” so for the purpose of this report, there are no specific interventions suggested for “out of workforce individuals.”

Strategy 3A. Prioritize identifying and supporting students who face economic and/or housing challenges. Make it a school focus to meet the needs of these students.

Some CTCs find it challenging to identify students who are experiencing homelessness or who may be facing economic hardship. This may be due to variations in how “homelessness” is defined or because homelessness is self-reported, and some students may choose not to identify as such. Some students may go without rather than ask for help, such as money to pay for field trips, uniforms, or other regular program costs.

To bring these challenges to the forefront and to actively address them, CTCs should designate a staff member to “own the job” of serving students in this special populations category. The designated person assumes responsibility for collecting data, identifying which students need support, leading discussions about what services are needed, ensuring services are provided, and monitoring student progress. To assist the point person in identifying students in need, all teachers should receive training on how to recognize students that are homeless/economically disadvantaged.

Strategy 3B. Collaborate with community resources and agencies to link students to services.

When CTCs, local agencies, and community resources communicate and develop strong working relationships, they can identify students and families who would benefit from services outside of school and develop procedures to link them with those services.

- a. Identify and reach out to external partners who can provide the resources and services students may need. At some CTCs, staff have created a working resource document in which they keep a running list of agencies and non-profit organizations that can provide services.
- b. Establish a point-of-contact for each of these agencies to streamline communication.
- c. CTCs and local workforce development boards develop a shared vision for how they can seamlessly work together to address community needs.

Strategy 3C. Engage and communicate with families.

A strong and inclusive school and community relationship supports students and their families. It can encourage a mutual sense of trust, provide clear lines of communication so that a variety of voices and perspectives are more clearly understood, and allow schools to connect with the families they serve so that they are aware of their needs.

- a. Use a variety of communication tools to reach families. CTCs may need to think outside the box to discover modes of communication that work well for their community.
- b. Designate a parent liaison to serve as a bridge between the CTC and families.

Strategy 3D. Gather, analyze and share data to monitor students' needs and to identify opportunities to implement new practices. (See Strategy 1A.)

Strategy 3E. Collaborate with sending schools. (See Strategy 1C.)

- a. CTCs should share data and information on students who may be experiencing challenges due to their economic and/or housing situation.
- b. As with students with IEPs, CTCs should conduct formal meetings to plan services for identified students.

Promising Practices Profiles: Students Facing Economic Challenges

[SUN Area Technical Institute: Student Awareness Team](#)

The Student Awareness Team identifies students who are struggling and proactively provides resources and support to address their specific barriers to learning.

[Susquehanna County Career & Technology Center: Funding Student Educational Needs through Partnership with Foundation](#)

Through a collaboration with the Community Foundation of the Endless Mountains, students who are financially eligible can receive scholarships to pay for the necessary expenses of their CTE program and the certification tests.

[Schuylkill Technology Center: School Climate Initiative](#)

The School Climate Initiative is based on the work of the National School Climate Center. It is a comprehensive effort to build strong school-to-student and school-to-family relationships so that students and families are connected and engaged in the school experience.

[Northern Westmoreland Career & Technology Center: Credit Recovery](#)

To support students who might withdraw from a CTE program, Northern Westmoreland CTC reimburses students for academic credit recovery during a summer school program if students successfully pass the course.

[Jules E. Mastbaum Area Vocational Technical School: Health Information Management and Medical Records Technology Community Partnerships](#)

Jules E. Mastbaum Area Vocational Technical School has established multiple partnerships with postsecondary institutions and other organizations to provide economically disadvantaged urban youth with experiences that empower them to interact effectively and professionally with adults. To engage students in the healthcare system and prepare them for college, career, and community service, the Health Information Management and Medical Records Technology program, several schools, and organizations have developed partnerships.

Section 4: Individuals Preparing for Non-traditional Fields

In Perkins V, non-traditional fields are defined as those “occupations or fields of work, including careers in computer science, technology, and other current and emerging high skill occupations, for which individuals from one gender comprise less than 25 percent of the individuals employed in each such occupation or field of work.” ([Perkins V section 3\(33\)](#))

In Pennsylvania, 12 percent of secondary students participating in a CTE program are enrolled in a nontraditional field.

Individuals preparing for non-traditional fields may face challenges related to cultural stereotypes, such as those that perceive certain fields as more male- or female-oriented. Because of these stereotypes, students who wish to pursue a non-traditional field may lack family and peer support for their choices. This lack of support and a lack of visible role models in the field can present challenges for students as they navigate their educational experiences.

Strategy 4A. Promote non-traditional fields to students and families.

There are many families and communities that still accept outdated stereotypes about non-traditional fields. These lingering stereotypes can discourage students from entering CTE programs in these fields, and/or cause families to pull back support for students who do want to pursue a non-traditional field. **Therefore, CTCs must graciously but persistently challenge these stereotypes by raising awareness about non-traditional fields and the opportunities available to students in these fields.** (**PDE is awaiting federal guidance on using language that best addresses gender diversity among students, and it will make updates accordingly.*)

Schools and CTCs should consider:

- a. **Exposing students early to non-traditional fields before stereotypes have been deeply internalized.** For example, many CTCs run summer camps for middle school students that teach them about non-traditional fields.
- b. **Hosting non-traditional student days specifically for students considering enrolling in a non-traditional field.** Such programs typically include shadowing opportunities and interviews with non-traditional students.
- c. **Hosting information sessions for families about non-traditional fields.** Use these sessions to address concerns and provide information on the benefits of careers in non-traditional fields.
- d. **Encouraging current students in non-traditional fields to serve as mentors to prospective students.** These peers can answer questions and provide an insider’s take on what is like to be in a non-traditional field.
- e. **With permission, using non-traditional students in school promotional videos.**
- f. **Making a concerted effort to hire non-traditional teachers.**
- g. **Intentionally recruiting non-traditional field representation to the Occupational Advisory Committee (O.A.C.).**

- h. **Taking students on field trips where they can observe employees in non-traditional fields.**

Strategy 4B. Focus on retention of non-traditional students.

Once students have enrolled in non-traditional field CTE programs, they may still face barriers to success due to factors such as existing stereotypes, lack of role models, and insufficient support by instructors and fellow students. **To prevent students from dropping out of non-traditional programs, CTCs should adopt some retention strategies.**

Examples include:

- a. **Establishing peer support groups for non-traditional students so they have a safe place to discuss their challenges and successes.** These peer groups can include students from multiple programs if there are too few students in a single program to make a group feasible.
- b. **Organizing a student mentoring program so that older students in non-traditional field programs can provide practical guidance to younger students.**
- c. **Surrounding non-traditional students with images, texts and materials that reinforce their program selection.** They should see people who look like them in the relevant career fields.

Strategy 4C. Educate teachers and provide professional development on how to support non-traditional students.

Professional development topics should address:

- a. Understanding what microaggressions are, their impact on students, and how to avoid using them. (Claudia Morrell training); and
- b. Providing ongoing support to non-traditional students to help with recruitment and retention.

Special note on racial and ethnic diversity:

While the non-traditional definition in Perkins specifically addresses non-traditional gender roles, the preceding strategies can also be applied to promote greater racial and ethnic diversity in CTE programs. This is particularly important if the racial and ethnic participation of a CTE program does not match the general racial and ethnic make-up of students attending the sending schools affiliated with the CTE.

Promising Practices Profiles and Other Resources: Individuals Preparing for Non-Traditional Fields

[York County School of Technology: Non-traditional Student Day](#)

Non-traditional students admitted to York County School of Technology attend a non-traditional Student Day prior to enrollment. During this event, students meet and shadow enrolled and experienced non-traditional students who will serve as mentors to them throughout their high school technical program experience.

[Upper Bucks County Technical School: Business Education Partnership Provides Apprenticeship Opportunities for Students](#)

The Careers in Construction Alliance is a collaborative effort between Upper Bucks County Technical School, Associated Builders and Contractors Eastern Pennsylvania Chapter (ABC), 500 regional commercial construction employers, and local high schools to promote careers and employment opportunities within the construction industry.

[Western Montgomery County Career and Technology Center: Using Recruitment Strategies and Brand Exposure Techniques to Increase Enrollment](#)

The administrative team and faculty implemented innovative recruitment and marketing strategies to support student enrollment and improve outreach to non-traditional students.

[Carbon Career and Technical Institute: Non-traditional Student Recruitment Video](#)

Carbon Career and Technical Institute developed an engaging 13-minute video to support non-traditional student recruiting efforts.

[Eastern Westmoreland Career and Technology Center: Non-traditional Student Recruiting Day](#)

The CTC hosts an annual day-long event for prospective eighth grade students to build awareness of non-traditional careers and to increase the enrollment of non-traditional students at the school.

Additional Resource

[Pennsylvania Department of Education: Suggested Resources Related to Non-traditional Careers](#)

Section 5: Single Parents, Including Single Pregnant Women

Single parents, including single pregnant women, may struggle to balance the competing demands of parenting, school, and for some, work. (**Note: "Single parents" refers to mothers and fathers.*) Due to challenges such as obtaining quality childcare, these students may have high rates of absenteeism and/or struggle to complete assignments on time. Single parents, including single pregnant woman, can suffer burnout, stress, and depression due to the multiple roles and responsibilities they must juggle, especially when they lack the resources and services to support them. Approximately 0.2 percent of secondary students participating in CTE in Pennsylvania are single parents.

Strategy 5A. Organize and run support groups for single parents (men and women) and single pregnant women so they have an opportunity to share experiences with and receive support from other students facing similar challenges.

Strategy 5B. Mentor students about how to balance responsibilities related to parenting, school, and work.

This may include running a small group to discuss these issues or setting up a regular schedule for students to meet with the guidance counselor.

Strategy 5C. Help students access community services to address issues related to childcare and transportation.

Strategy 5D. Provide ongoing postsecondary and career guidance so that single parents/single pregnant women can make a well-informed decision about pursuing a career field that offers a family sustaining wage.

Encourage students to identify financial considerations and how to address them. Educate them about the Free Application for Federal Student Aid (FAFSA) and other financial assistance programs.

Strategy 5E. When possible, consider ways to build in flexibility around attendance requirements, such as allowing make-up sessions, as this often is a primary issue for single parents due to concerns such as childcare.

Strategy 5F. Provide guidance on parenting and family relationships through classes and other community resources.

The topics to be addressed should include parenting classes, infant and child First Aid/CPR, and safe relationship support.

Strategy 5G. Link single parents to mental health support, either in school or through local agencies.

Section 6: English Learners

Three percent of secondary students participating in CTE in Pennsylvania are English Learners (EL). While every CTC may have some EL, there appears to be concentrations of EL in certain parts of the Commonwealth. In some of these communities, EL may make up as much as 50 to 75 percent of the general student population. Yet, even at CTCs with low numbers of EL students, educators need to address how to best meet the needs of these students.

Students who are identified as EL are a diverse group of learners, as their English language proficiency, acquisition rates, and home languages can all vary. Given this diversity and because so much of CTE instruction involves highly technical language, it can be a challenge for instructors to meet the significant learning needs of these students. Schools must implement strategies that not only teach EL the content and skills they need, but also provide supports for these students to develop their English language skills.

Strategy 6A. Provide professional development to instructors and instructional assistants on how to use instructional strategies to meet the needs and learning goals of EL. (See Strategy 1B.)

Professional development needs to be applicable to the CTE classroom so that instructors see the value in using the strategies and can reasonably implement them.

Strategy 6B. Deploy EL classroom assistants so that they can provide push-in services in the CTE classroom.

A classroom assistant can provide services to ELs in the classroom, giving students the opportunity to receive support and resources during instruction and within the context of the CTE environment.

Strategy 6C. Set the expectation that the CTE instructor and EL instructor collaborate for planning, instruction, and assessment.

CTE instructors and EL instructors should work together to identify how a lesson plan can be adapted to meet the needs of ELs. This type of collaboration leads to a shared understanding of learning goals, instructional strategies, and assessments.

Strategy 6D. Provide instructors with resources and materials that support their efforts to instruct English Learners effectively in the CTE classroom.

ELs benefit from materials that help address language barriers. For example, providing cue cards and translated text when appropriate can help ELs build background knowledge, language skills, and technical skills.

Strategy 6E: Use instructional practices that support learning and address the language barrier.

Effective practices support language acquisition and comprehension of terms specific to the subject matter. In practice, this may look like using visual cues, graphic organizers, word walls, pre-, during- and post-reading strategies, and hands-on demonstrations.

Strategy 6F: Engage students and families in the school community.

ELs and their families are valuable members of a school community. Schools can engage them in the community through outreach, services, and discussion. In practice, this could include:

- a. Providing a bilingual parent liaison.
- b. Building cultural knowledge, awareness, and sensitivity among CTC staff.

Strategy 6G: Provide access to translation services (written) and interpretation services (oral) for students and their families.

ELs and their families benefit when they can easily access information and communicate effectively with school personnel. To help them achieve this, CTCs and schools can:

- a. Translate all school documents that are sent home into the home language. This includes administrative, classroom and promotional/informational items.
- b. Translate school signage.
- c. As needed, provide photographs to complement translated materials.

Strategy 6H. Provide transition services for students enrolling in the CTC.

ELs benefit from services that help ease their transition to the CTC. These services require coordinated planning and communication between the CTC and the sending school, as well as early and sustained outreach to the students and their families. CTCs and sending schools should “frontload” these conversations - start the conversations as early as possible, and at least in the spring before the students start at the CTC in the fall.

Specific practices that could be implemented to help facilitate the transition for students include:

- a. Provide a guided tour of the CTC and its programs to prospective students and their parents. Give them an opportunity to see the programs offered, possibly sit in a few classes, and get information on programs of interest. This should be done in the spring so students and parents have a good understanding of programs in order to make an informed decision.
- b. Give students and parents the opportunity to meet with CTC EL staff prior to enrollment so that they know who to go to for EL support and are familiar with the resources available to them.
- c. Provide an opportunity for students and parents to meet with their CTE instructor before the student begins the program. This allows them to become familiar with the instructor. The instructor can explain the program and expectations to them and address any questions or concerns.

Promising Practices Profiles and Other Resources: English Learners

[Thomas Edison High School: Hands-on Support for English Learners in the CTE Classroom](#)

A classroom assistant provides support to English Learners in their CTE classes.

[Reading Muhlenberg Career & Technology Center: Enrolling and Supporting English Learners in CTE](#)

A full-time EL assistant provides push-in support services for English Learners. To create and fund this position, the Reading School District and Reading Muhlenberg Career & Technology Center administrators collaborated to reallocate a district support staff member to the CTC.

[Erie High School: Push in Services to Support EL Students in CTE](#)

An English Learner instructor provides services inside CTE classes (“pushes in”) to support EL students.

[An Introduction to Working with English Language Learners in CTE](#)

This 30-minute narrated presentation was developed as a professional learning resource for CTE teachers and staff who have little experience teaching students with limited English proficiency.

[Video: Reading Muhlenberg Career & Technology Center – Serving English Learners](#)

The administrative director discusses how a full-time EL assistant provides push-in support services for English Learners.

Section 7: Youth Who Are In, or Have Aged Out of, the Foster Care System

Many students in foster care or who have aged out of foster care face significant challenges across multiple areas of their lives. In Pennsylvania, about 0.7 percent of secondary students participating in CTE are in or have aged out of foster care. These students often endure trauma, high mobility rates and other significant barriers to learning and their general welfare that create gaps and inconsistencies in their education, as well as cognitive barriers to learning. CTE can provide these students with a pathway to postsecondary education or training, or the workforce, and set them up to overcome barriers to financial and emotional stability.

Strategy 7A. Provide intensive postsecondary and career guidance to students in foster care or who have aged out of foster care.

These students may benefit from intensive personal support in establishing and following through on their educational and career plans because of the financial challenges they face and the lack of coordinated planning and preparation earlier in their school experiences.

Strategy 7B. Collaborate with the child welfare agency, social workers, and other relevant local agencies to monitor students' progress and identify needs to address, and practices to implement.

- a. Coordinate services to students in foster care. Establish points of contacts in related community agencies to streamline communication.
- b. Maintain and share relevant data, especially given the high transiency among this student population.

Strategy 7C. Identify a point person in the CTC who is responsible for checking in with students in foster care to see if/how their needs outside of school are being met.

The point person should learn about these students' lives – what trauma they may have experienced, what their current living arrangements are – and establish trust with them. The point person should be knowledgeable about living situations in Pennsylvania so that students can be informed of their options/opportunities.

Strategy 7D. Through professional development sessions or conversations with child welfare agencies, educate CTC staff members, especially the point person, about foster care and its impact on students.

Professional development topics should address:

- a. The foster care system, such as the fact that children can stay in foster care until age 21;
- b. Characteristics of students in foster care, so that staff develop a cultural understanding of these students;
- c. Available funding sources for postsecondary education, such as [Chaffee Scholarships and the Fostering Independence Tuition Waiver Program](#), as foster care students face substantial financial barriers when pursuing postsecondary education opportunities; and

- d. To the extent possible, provide reasonable flexibility to students regarding homework and testing dates as their day-to-day lives outside of school may affect their ability to meet deadlines.

Promising Practices Profiles: Youth Who Are in or Have Aged Out of the Foster Care System

[Greater Johnstown Career & Technology Center: Ongoing Support for Students in the Foster Care System](#)

The special education facilitator collaborates with the court advocate, caseworkers, and sending school faculty to support students who are in the foster care system.

Section 8: Youth with a Parent Who Is a Member of the Armed Forces and Is on Active Duty

Students with a parent who is on active duty in the armed forces may experience a lack of predictability and structure in their lives, high mobility rates, and emotional stress due to their parent's occupation, all of which can interfere with their learning. These students often experience disruption in their schooling due to frequent moves, which can pose challenges related to maintaining up-to-date records, finding, and enrolling in appropriate courses, and establishing stability across their learning experiences. About 0.5 percent of students participating in secondary CTE programs have a parent who is a member of the armed forces and is on active duty.

Because of the low incidence of students with active-duty military families in Pennsylvania, the following strategies are suggested for consideration, but are not well documented within Pennsylvania.

Strategy 8A. Develop contacts with nearby military installations or national guard posts to stay informed about upcoming training activities or significant personnel deployments.

Advanced knowledge, or at least real-time knowledge of these activities, can allow CTC staff to anticipate possible disruption in the home life of military-connected students.

Strategy 8B. Identify when these students may be stressed or concerned about their parent, especially after a parent deploys, and then provide emotional support for them through school counseling and peer support groups.

Strategy 8C. Organize and run support groups for students to share experiences with and receive support from their peers.

Strategy 8D. Provide online resources like march2success.com to help students prepare for SAT, ACT, and STEM activities.

While this site is NOT specific to children with parents in armed forces, it can still help address needs of students whose parent is deployed.

Strategy 8E. For incoming students with previous CTE experience, use the program task list to document the knowledge and skills the students already attained.

Strategy 8F. Work with student information system vendors to add this special populations group as a demographic sub-group.

Strategy 8G. To the extent possible, provide these students with consistent school and classroom routines.

This general practice will have a particularly positive impact for students with a parent on active military duty whose home routine may have been disrupted.

Strategy 8H. Establish processes to ensure records are received and transferred on a timely basis.

This general practice will have a particularly positive impact for the student who is transferring from one school to another because of a parent's active military duty.

Appendix A: BCTE Special Populations Working Group Members, 2020-2021

BCTE Special Populations Working Group Members, 2020-2021

Name	Organization	Title/Position
Michelle Armstrong	The School District of Philadelphia	Executive Director, Office of CTE
Patty Bicanich	PA CTE Resource Center, Penn State Greater Allegheny	Center Director
Wendy Chalmers	SUN Area Technical Institute	Special Education - Resource Instructor
Dr. Alice M. Davis	Susquehanna County Career and Technology Center	Executive Director
Neil Donovan	PACTA	Career Technical Distinguished School Leader
Cynthia Gross	PDE-BCTE	Civil Rights and Nontraditional Programs Coordinator
Karen Gulotta	Lebanon County Career and Technology Center	Special Populations Coordinator
Dr. Michael Harvey	Penn State University	Professor, Education
Eric Heasley	A.W. Beattie Career Center	Executive Director
Cynthia Hughes	Parkway West CTC	Special Populations Coordinator
Pegeen Kopera	Bucks County Technical High School	Supervisor of Special Education
Gary Martell	Northern Tier Career Center	Director
Angela Mike	Pittsburgh Public Schools	PPS-CTE Executive Director
Dr. Mary Rodman	PACTA	PIL Coordinator
Scott Rogers	York County School of Technology	Assistant Director
Jena Seidle	Venango Technology Center	Special Populations Coordinator
Carla Thimons	Lenape Technical School	Special Programs Coordinator
Traci Wildeson	Clarion County Career Center	Director
Kwanita Williams-Holt	The School District of Philadelphia	Career Integration Specialist
Gerald (Jere) Witmer	PACTA	Career Technical Distinguished School Leader