

# Pennsylvania Technical Assistance Program

Improving Academic and Occupational Achievement in Career and Technical Education

## Pennsylvania Department of Education

### Technical Assistance Program

2025- 2026

For the 2025-2026 school year, the Pennsylvania Department of Education's Technical Assistance Program (TAP) will provide the following activities for career and technology centers (CTCs) and school districts.

Each activity will include training days and coaching days. Your school has confirmed all TAP services you will participate in during the 2025-2026 school year. Schools were chosen to participate in the various activities based on review of the *Intent to Participate Survey* responses and a school's ability to most benefit from each TAP activity.

TAP Consultants will adapt training and coaching sessions to meet the specific needs of each school. Activities will be delivered on-site and/or virtually as feasible and appropriate for each school. **Each school must commit to the training and coaching days listed for each TAP activity.**

By signing and returning your Memorandum of Agreement (MOU), you agree to participate in all TAP activities listed on the MOU. **Each school must commit to the training and coaching days listed for each activity. BCTE staff expects schools to commit to and participate in the TAP activities listed on the MOU.** If you are unable to participate in an activity listed on your MOU, contact Jean McCleary at [jemccleary@pa.gov](mailto:jemccleary@pa.gov).

Most TAP activities include training days and coaching days. The number of days required for each activity is listed on the following activity description pages. **TAP Consultants will contact each school to schedule training and coaching days after the MOU is received.**

PIL program activity dates and locations will be available at [www.pacareertech.org](http://www.pacareertech.org) soon.

# Pennsylvania Technical Assistance Program

Improving Academic and Occupational Achievement in Career and Technical Education

## NOCTI Pre-Tests and Study Guides

### Pre-Tests – **2026 GRADUATES**

Juniors in Spring 2025: March 1-April 28, 2025

Seniors in Fall 2025 (if not pre-tested in Spring 2025): September 1-October 31, 2025

### **2027 GRADUATES**

Juniors in Spring 2026: March 1-April 28, 2026

Seniors in Fall 2026 (if not pre-tested in Spring 2026): September 2-October 31, 2026

Study Guides (digital) – To be used with seniors between the pre-test and post-test throughout the 2025- 2026 school year.

NOCTI pre-tests are required to be administered to students either in the spring of their junior year **OR** in the fall of their senior year. Students (seniors) who are anticipated to complete their career and technical programs in June 2026 should be pre-tested in Spring 2025 or Fall 2025. Pre-tests are the multiple-choice portion of NOCTI's Job-Ready post-tests. Reports include a *Group Score Reports*, *Competency Reports*, and *Individual Score Reports*. Comparative data is not provided for pre-tests. These reports provide schools with information and data to assist instructors and students in identifying skill strengths as well as gap areas that need further remediation. These reports are excellent diagnostic tools to help instructors adjust curriculum to meet the specific needs of students. Targeting the identified curriculum areas for remediation throughout the school year has shown improved student performance on the NOCTI post-test.

NOCTI Study Guides are required to be used with students between the pre-test and post-test. Using Study Guides to target the identified curriculum areas for remediation throughout the school year will ultimately improve student performance on the post-test. Study Guides contain information on both the multiple-choice and performance portions of the post-test including an overview of the test which shows percentages of each duty covered and study checklists for each duty in the written and performance portions of the test.

# Pennsylvania Technical Assistance Program

Improving Academic and Occupational Achievement in Career and Technical Education

## Career and Technical Distinguished School Leader (CTDSL)

The CTDSL will work as part of the school team to assist in identifying systemic or instructional barriers to improving academic and career and technical student achievement. The role of the CTDSL is flexible in its implementation according to the perceived needs of each school and will work closely with the school's administrators and team members. Ultimately, **the goal is to identify and overcome barriers and gaps so that students can experience more success with reading and math and end-of- program occupational assessments.** All CTDSLs have had experience as career and technical education (CTE) administrators and have demonstrated results in student achievement from their own leadership experience.

A key element to the work of the CTDSL is the connection between the CTC and the sending school districts. The CTDSL can help the CTE school team make the necessary connections so that an approach to common problems can be developed and short-term goals can be set. As the year progresses, the CTDSL can help the team look at the larger scope of technical and academic integration of 21st century learning into CTE programs.

The support that a school receives from a CTDSL may include, but is not limited to, expertise in data analysis, knowledge of current standards-based reform, knowledge of staff development for systemic change and utilization of current practices in integrating CTE into academic instruction resulting in improved student achievement.

# Pennsylvania Technical Assistance Program

Improving Academic and Occupational Achievement in Career and Technical Education

## Southern Regional Education Board (SREB) Services

### **(1) Leadership Development & Strategic Planning Services:**

Target Population: CTE directors, Regional Leaders, School-level Leaders, Counselors, Student Support Services, and Teachers

**CTE Leadership Academy** – Builds leadership capacity to drive instructional and programmatic excellence.

### **(2) Program and Instructional Quality Support Services:**

Target Population: District and School Leadership and Teachers

**Curriculum and Instructional Reviews (CIRs)**: Detailed, evidence-based feedback on instructional quality and alignment.

- Focus on working with data analyzing - aligned curriculum, career pathways, continuous improvement. This is more of a school improvement model. Survey and interviews to build model.
- Engage the schools in a root cause analysis.

**Professional Learning Communities (PLCs)**: Regional and virtual groups to support peer collaboration and resource sharing.

### **(3) Data-Driven Improvement: Comprehensive Local Needs Assessment (CLNA) and Perkins Alignment**

Target Population: District/State Leaders, CTE Directors, and Data Teams

- **CLNA Data Workshops**: Facilitate analysis and strategy development aligned with Pennsylvania's six CLNA focus areas:
  - Performance on Perkins Indicators
  - Program size, scope, and quality
  - Labor market alignment
  - Equitable access
  - Recruitment, retention, and professional development
  - Implementation of CTE programs of study
- **Perkins Indicator Support Sessions**: Regional or site-level data reviews, root cause analysis, and improvement planning.
- **Support for Low-Performing Sites**: Targeted intervention support, coaching, and alignment with CLNA priorities.

# Pennsylvania Technical Assistance Program

## Improving Academic and Occupational Achievement in Career and Technical Education

### Writing in CTE Content Areas

Writing in CTE Content Areas will provide the foundation of an effective writing program and will demonstrate to instructors in any CTE content area how to use writing-to-learn and learning-to-write activities to increase students' understanding and retention of course content while simultaneously increasing student engagement and motivation to learn. Most importantly, this workshop will give instructors the help they need to efficiently and fairly evaluate writing so that students become more skillful as a result of the process.

Coaching activities will be customized to each school's and instructor's needs and may include, but are not limited to:

- Planning time to incorporate writing prompts into lessons.
- Modeling and/or co-teaching, implementing effective writing practices in classrooms.
- Observing and providing feedback on implementation of effective writing practices.
- Working with instructors one-on-one or in small groups to provide customized support, as needed.

Writing in CTE professional development consists of an initial training, delivered either on-site or virtually through a facilitated synchronous/asynchronous online Schoology course. The initial training is followed by coaching and support days, tailored to the needs of CTE instructors to ensure that they have the skills to improve the writing process for students. Follow-up coaching can be on-site or virtual.

Each school will receive one day of training and four days of coaching.

# Pennsylvania Technical Assistance Program

**Improving Academic and Occupational Achievement in Career and Technical Education**

## **MAX Teaching Data Literacy**

This training illustrates teaching strategies related to literacy for implementation into all instructional environments, particularly the CTE classroom. These strategies address current literacy deficiencies of the student population. Through a collaborative effort between the CTC and their sending districts, overall student academic achievement as well as technical skill attainment can be improved.

Professional development activities at each school will allow administrators, CTE and academic instructors and sending district instructors to learn research-based teaching strategies related to literacy which can be implemented into all instructional environments. In addition, instructors will observe the consultant modeling the teaching strategies using the school's own reading materials and lesson plans.

MAX Teaching has developed and structured a training plan that can be delivered utilizing a variety of learning management systems and distance learning resources. This training can be delivered as face to face, synchronous, or asynchronous as feasible and appropriate for each school. The options for professional development will be determined based on site and level of implementation of content literacy-based instruction.

# Pennsylvania Technical Assistance Program

**Improving Academic and Occupational Achievement in Career and Technical Education**

## Teacher Coaching Clinics

Research has long supported the idea that one of the greatest impacts on student achievement is having a skilled professional teacher at the front of the room. Supporting teachers with their pedagogical skills are the professional lifeline needed to improve student achievement. When teachers are effective, students learn.

The Teacher Coaching Clinics will bring lead/mentor teachers and instructional coaches together to support the struggling teacher/new teacher and share best practices and integration strategies across CTE program areas. The clinics are open to all CTE coaches, academic/CTE teachers, Perkins facilitators and administrators interested in supporting teachers to improve instruction and student achievement through a coaching model.

For each session, we ask that each attendee bring a best practice to share. We would like schools to consider including their mentor teachers in this activity to share their induction programs with the group. These workshops will be interactive and engaging, while at the same time participants will be able to network and establish contacts and professional relationships with colleagues in similar positions. Every participant will return to their school with a variety of ideas that they can use to support teachers and improve instruction and student achievement.

# Pennsylvania Technical Assistance Program

**Improving Academic and Occupational Achievement in Career and Technical Education**

## **Pennsylvania College of Technology**

**Target population: CTE instructors in PDE-approved CTE programs of study.**

Bringing the existing PDE-approved secondary CTE programs into alignment with the needs of Pennsylvania businesses is imperative. This is a collaboration with Penn College to support the professional development needs of the Commonwealth's secondary CTE educators by leveraging partnerships, technical and educational resources, and faculty expertise. The collaboration will develop and foster a learning community through the delivery of a unique and innovative teacher-training-and-mentoring professional development program: virtual/online training, online group mentoring, in-person classroom observation, corporate engagement, and a three-day capstone externship.

- Activity 1: Host Virtual High School Teacher Training. This will provide accessible training on technical and academic topics and professional technical/educational mentoring. Two required components: (1a) monthly on-demand lessons, with technical and academic assignments; (1b) virtual mentoring sessions with faculty.
- Activity 2: Host On-Campus Visit Days. Days for at least two of: classroom observations; corporate engagement; postsecondary pathways engagement with industry; and College and career readiness.
- Activity 3: Capstone Teacher Externship. Three-day culmination with hands-on workshops, corporate, educational learning for technical and cross-disciplinary skill training.

# Pennsylvania Technical Assistance Program

**Improving Academic and Occupational Achievement in Career and Technical Education**

## **PaTTAN Math and Literacy Strategies:**

### **Target Audience: CTE Instructors**

Improving math and literacy in Career and Technical Education (CTE) unlocks a powerful set of benefits for students, teachers, entire school communities, and the workforce. This service will be delivered by PaTTAN to specifically support activities that will target math and literacy instruction for students enrolled in CTE programs. The service aligns with state and federal goals supporting the Perkins V 2S1 and 2S2 performance indicators, helping schools meet accountability targets. The following service will be delivered using a co-hort model. The service will provide the following:

- Strengthening instructional effectiveness by teachers developing a deeper understanding of how academic and technical content overlap,
- Improving lesson quality,
- Fostering collaboration and encouraging integrated partnerships between CTE and academic teachers through professional learning communities,
- Supports differentiated instruction in literacy and math strategies tailored to meet diverse student needs, including struggling readers or math learners.

# Pennsylvania Technical Assistance Program

Improving Academic and Occupational Achievement in Career and Technical Education

## Pennsylvania Inspired Leadership Programs

### Target Audience: Administrative and supervisory CTE personnel

Pennsylvania Inspired Leadership (PIL) programs are statewide, standards-based continuing professional education programs for school leaders. Each comprehensive program is focused on developing the capacity of leaders to improve student achievement. The Pennsylvania Department of Education/Bureau of Career and Technical Education will assume the cost of two administrators seeking Act 45 hours in each of the PILs. The following PIL programs will be offered in the 2025-2026 school year:

#### Fall 2025 Offerings

- *Leadership through Design: Enhancing Student Growth & Achievement*
- *New Director Academy – Part 1 – see description below*
- *Supporting Mental Health in CTE*
- *Using High-Quality CTSOs to Increase Student Achievement – see description below*

#### Spring 2026 Offerings

- *AI in the CTE Environment*
- *Using Advocacy to Support Student Achievement*
- *Transitioning to CTE Administration*

### Leadership through Design: Enhancing Student Growth & Achievement

Leadership through Design: Enhancing Student Growth & Achievement is a semester-long PIL offered by the Pennsylvania Association of Career and Technical Administrators (PACTA) in partnership with the Consortium for Public Education (CPE) for PACTA members. This course is designed for administrators who want to strengthen their leadership skills using human-centered design (HCD) to enhance student growth and achievement. The program will be delivered through 4.5 days of synchronous virtual instruction, optional coaching check-ins, and job-embedded assignments, allowing participants to apply the learning directly in their schools and maintain contact with instructors and facilitators for guidance and feedback. Course topics include (1) Understanding and applying the five phases of the human-centered design cycle, (2) Addressing the needs of diverse student subgroups, including students with IEPs/GIEPs, minority students, low-income students, and English learners, and (3) Creating actionable plans to improve students growth and achievement while reflecting on leadership impact through a portfolio of artifacts.

# Pennsylvania Technical Assistance Program

## Improving Academic and Occupational Achievement in Career and Technical Education

### New Director Academy – Part 1

The New Director Academy - Part 1 is a 30-hour PIL for new directors (less than five years of experience), current administrators aspiring to the director's position, or current directors who desire a more in-depth understanding of the critical aspects of their roles and responsibilities and desire to network with their peers. The course will be delivered through five sessions of synchronous instruction and three one-hour mentoring sessions. This will allow participants to maintain contact with the instructors and course/project facilitator to provide the maximum opportunity for participants to be able to gain the knowledge and skills necessary to answer the essential questions and to fulfill the competencies and sixteen hours of job-embedded assignments of the course. The course topics are (1) Supervision and evaluation, (2) Leadership, and (3) Connecting supervision, evaluations, and leadership to student achievement.

### Supporting Mental Health in CTE

This course equips administrators to address mental health issues among high school students, including anxiety, depression, substance abuse, eating disorders, ADHD, and self-harm, through a comprehensive, multi-faceted approach. Participants will explore strategies such as school-based mental health services, mental health education, peer support programs, family engagement, promotion of healthy coping mechanisms, reducing academic pressure, early intervention and screening, collaboration with community resources, destigmatization efforts, and crisis response protocols. By implementing these practices, administrators can create a supportive, nurturing environment that promotes student well-being and academic success while gaining skills and evidence aligned with multiple components of the Framework for Leadership, including Domains 1a, 1b, 1c, 1d, 2a, 2c, 2d, 2e, 2f, 2g, 3c, 3d, 4a, 4b, and 4c.

### Using High-Quality CTSOs to Increase Student Achievement

This self-paced, online course includes nine hours of pre-recorded lessons and 21 hours of job-embedded assignments designed to enhance co-curricular Career and Technical Student Organizations (CTSOs). Participants will learn to increase student participation, improve CTSO quality through Programs of Activities and advisor selection, and boost student skill achievement through collaboration between CTSO advisors and CTE teachers. Each selection includes practical assignments, such as overcoming participation barriers, developing advisor roles, and integrating academic, leadership, and career skills into student portfolios. Administrators will gain skills and evidence aligned with multiple components of the Framework for Leadership, including Domains 1a, 1c, 1d, 2a, 2b, 2d, 3b, 3d, 4a, and 4c.

# Pennsylvania Technical Assistance Program

## Improving Academic and Occupational Achievement in Career and Technical Education

### AI in the CTE Environment

This course is designed for CTE administrators and other administrative personnel to explore how artificial intelligence (AI) can enhance student learning, instructional practices, and career readiness. Delivered as a hybrid course with 10 hours of theoretical instruction and 10 hours of job-embedded assignments via Zoom and Canvas LMS, participants will engage in synchronous sessions and complete practical assignments, including a culminating project. By the end of the course, participants will understand AI's role in CTE, evaluate and implement AI tools, develop strategic integration plans, support teachers in AI applications, and measure the effectiveness of AI-enhanced learning initiatives. The course aligns with Pennsylvania Leadership Standards, including Core Standard 1 and Corollary Standards II, III, and VI.

### Using Advocacy to Support Student Achievement

This course prepares administrators to advocate for their students within the broader political, social, economic, legal, and cultural context, in alignment with Pennsylvania Inspired Leadership Standards. Participants will learn to leverage human and fiscal resources from external communities to enhance school operations, expand technical equipment, and create opportunities for students to develop and demonstrate leadership skills. The program includes six hours of online instruction and pre-recorded interviews with experienced CTE administrators, organized into three sections: using student achievement data in public relations, presenting to community organizations, and meeting with legislative members to advocate for CTE. Participants complete a culminating project aimed at securing financial and legislative support to advance CTE in their schools, gaining skills and evidence aligned with the Framework for Leadership Domains 1a, 1b, 1c, 1e, 2a, 2e, 2f, and 4a.

### Transitioning to CTE Administration

This course is designed for administrators currently serving outside career and technical education (CTE) settings, providing a summary of the key differences between administration in traditional academic schools and CTE programs, whether comprehensive or shared-time. Through 10 hours of theory and 20 hours of job-embedded assignments, participants gain foundational knowledge and applied skills to lead successful CTE programs in Pennsylvania. Key areas include understanding CTE structures and compliance requirements, managing governance and budgeting, leading integrated curriculum and instruction, supporting equitable access for special populations, and building partnerships with community and industry stakeholders. The course emphasizes leadership development through Pennsylvania Inspired Leadership Standards and SMART goal setting, preparing administrators to enhance student learning, achievement, and post-secondary readiness.