

Pennsylvania Technical Assistance Program

Improving Academic and Occupational Achievement in Career and Technical Education

Pennsylvania Department of Education Technical Assistance Program 2023-2024

For the 2023-2024 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 2023-2024 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.

Due to the ongoing updates to school safety regulations, TAP Consultants will adapt training and coaching sessions to meet the specific needs of each school. Activities will be delivered on-site, 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 Erin Young at elw12@psu.edu. This information will be reported to the BCTE staff.

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 soon.

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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.

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NOCTI Pre-Tests and Study Guides

Pre-Tests – **2024 GRADUATES**

Juniors in Spring 2023: March 1-April 28, 2023

Seniors in Fall 2023 (if not pre-tested in Spring 2023): September 1-October 31, 2023

2025 GRADUATES

Juniors in Spring 2024: March 1-April 30, 2024

Seniors in Fall 2024 (if not pre-tested in Spring 2024): September 2-October 31, 2024

Study Guides (digital) – To be used with seniors between the pre-test and post-test throughout the 2023-2024 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 2024 should be pre-tested in Spring 2023 or Fall 2023. 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.

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SREB Training Programs

SREB will provide a variety of training programs for schools in the 2023-2024 school year. SREB will adapt the trainings below to fit the needs of each school.

Each school will receive six days of training and coaching.

SREB High Quality CTE Programs

Professional development will be provided for teachers that blends instructional strategies with career pathways, aligned curriculum, effective Occupational Advisory Committees, work-based learning strategies, and high-quality assignments/feedback, formative/summative assessments, and the integration of CTSOs and academics using the 12 Elements of the Framework for High Quality CTE Programs of Study. Training and coaching on social emotional learning, creating a culture of dignity, and meeting the needs of students of color, English Learners, and students with special needs will be provided.

SREB Leadership Training

Leadership training and coaching will be provided to support implementation of professional learning for school improvement using the ACTE's Framework for High Quality CTE. Support will be provided for school leaders addressing areas such as how to overcome scheduling challenges, providing effective teacher feedback, addressing social emotional learning, creating a culture of dignity, and meeting the needs of students of color, English Learners, students with special needs, and other Perkins V subgroups.

SREB Data Analysis Training

Data analysis training will also be provided with participants learning to apply the SREB problem-solving process with root-cause analysis and action planning. These sessions are designed to help leaders and teacher look at data to ensure growth and address the unique needs of all subgroups of learners.

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SREB Curriculum and Instruction Review and Career Pathway Review Making Schools Work State Membership (Enhanced Level)

SREB consultants will conduct Technical Assistance Visits consisting of Curriculum and Instruction Reviews (CIR) and Career Pathway Reviews (CPR) for the Comprehensive Local Needs Assessment (CLNA)/Perkins V follow-up improvement process. In addition to the review, each site will receive a full-written report on best practices and areas of growth, as well as recommendations for school improvement. These visits will be followed-up with a site-development workshop where focus teams will be developed and composed of teachers, leaders, and community partners that will be trained in the application of SREB's problem-solving process to find the root cause of problems of practice and develop action plans to address those problems. The visit will consist of a team that will review and analyze multiple data sources – including student achievement data, demographic data, and workforce data – as well as classroom/lab observations and reviews of lesson plans, assessments, and course syllabi. Interviews and surveys will be conducted with individual focus groups of parents, business and industry partners, students, teachers, and post-secondary partners. These on-site reviews will be followed up with written reports providing promising practices, areas of growth, and recommendations for leadership and focus teams to consider. These reviews will help each site efficiently and equitably better serve each student, with added attention being given to students of color, English Learners, and special needs students.

The **Curriculum and Instruction Review (CIR)** is one of SREB's most valued school improvement services. The CIR streamlines the process for participating schools to receive a valuable analysis of their practices through a partnership of an external SREB team and a team of educators, school leaders, and community partners selected from neighboring schools or districts and the state. All team members are trained to create a snapshot of a school's practices. The CIR also includes interviews, focus group discussions, classroom observations, an instructional review of lesson plans, assessments and course syllabi, and a report of findings.

The **Career Pathway Review (CPR)** will provide a snapshot of a school's practices and provide feedback on the strength of its CTE programs. This process helps administrators and teachers complete the CLNA that is required by Perkins V and identifies the changes needed to improve student achievement by blending college-ready academics with quality CTE studies. The CPR report of findings provides a school with an external look at how its CTE programs align with local, regional, and state workforce needs; produce graduates prepared for postsecondary studies and work; offer value-added academic achievement; and engage students in every classroom. The review includes analyses of multiple data sources including student achievement data, demographic data and workforce data, as well as interviews and focus group discussions with key shareholders, classroom observations and reviews of classroom plans and assessments.

A CPR will help a school understand whether their pathways and CTE programs are aligned with labor market needs, prepare students for postsecondary programs and work, and offer challenging, non-duplicative sequences of career pathway courses in secondary, postsecondary and workplace settings.

Each school will receive up to 30 days of training/coaching where all CTE and academic programs will be assessed. This activity would be beneficial for a new administrator/administrative team.

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SREB Advanced Career Pathways Curricula

Free access to SREB's nine Advanced Career (AC) Curricula for all sites in Pennsylvania. Each of AC's turnkey four-course pathways offers everything schools need to implement the curricula, from fully developed lesson plans, projects, assessments, tools, and technology to extensive training and support for teachers.

1. Aerospace Engineering
2. Automated Materials Joining Technology
3. Clean Energy Technology
4. Energy and Power
5. Global Logistics & Supply Chain Management
6. Health Informatics
7. Informatics
8. Innovations in Science and Technology
9. Integrated Production Technologies

The schools that choose to adopt any of the AC pathways will be responsible for the cost of training and equipment for AC implementation.

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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.

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MAX Teaching with Reading and Writing

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.

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

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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.

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Regional Career Pathways Partnerships YouScience

formally National Center for College and Career Transitions (NC3T)

This activity will provide ongoing coordination and information sharing among all the partnerships that participated during the previous years. This coordination will include virtual meetings among all the partnerships, individual check-in calls and posting of resources on a shared website. Direct on-site and virtual coaching will be provided. **CTCs and their partnerships that want to continue participating must apply for continued services.**

This activity will:

- Provide coaching for existing Pathways Partnerships and up to two new Pathways Partnerships that seek support in developing a regional effort.
- Work with representatives of the Pathways Partnerships to identify key challenges and needs.
- Create and share four quarterly updates through e-newsletters on the work of the respective Pathways Partnerships.

Each site will participate in four workshops and additional coaching sessions.

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Equity Data Inquiry in Career and Technical Education

To meet the diverse needs of all students in career and technical education (CTE), teachers and administrators need to use data to identify and address equity issues. The Mid-Atlantic Equity Consortium's (MAEC) Center for Educational Equity (CEE) will support Career and Technology Centers (CTCs) in uncovering areas of strength and areas of focus related to student's academic experiences and sense of belonging. Across three workshops, participants will:

- Learn about the nine step Equity Data Inquiry Process and engage in the process using their own student data.
- Use the Equity Data Inquiry Process to analyze existing quantitative data related to student performance and experiences.
- Evaluate the types of data their school is collecting and explore ways to collect qualitative data on student experiences and outcomes.
- Learn about ways to leverage data inquiry to create action plans to increase equitable access and outcomes for students.

These workshops will support CTCs in addressing the following competencies and standards from the Culturally-Relevant and Sustaining Education (CR-SE) Program Framework:

Identify, Deepen Understanding of, and Take Steps to Address Bias in the System

- Standard CRSE2.A: Know and acknowledge that biases exist in the educational system.
- Standard CRSE2.C: Identify literature and professional learning opportunities for themselves to understand more about the manifestations of racism and other biases at institutional and structural levels that can result in disadvantaging some groups of learners, educators, educational leaders, and families while privileging others.
- Standard CRSE2.E: Recognize schools' history of inequities and institutional biases and their consequences.
- CRSE2.F: Disrupt harmful institutional practices, policies, and norms by advocating and engaging in efforts to rewrite policies, change practices, and raise awareness.

Provide All Learners with Equitable and Differentiated Opportunities to Learn and Succeed

- Standard CRSE4.B: Create an equitable learning environment by challenging and debunking stereotypes and biases about the intelligence, academic ability, and behavior of Black, Indigenous, and People of Color (BIPOC) and other historically marginalized learners, educators, educational leaders, families, and caregivers.
- Standard CRSE4.D: Provide multiple pathways and opportunities for students to achieve academic and social success.

This professional learning series will include two days of content building workshops and one coaching workshop that will focus on the application of the Equity Data Inquiry Process.

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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 2023-2024 school year:

Improving Student Outcomes Through Industry Credentials, Employer Engagement and Business Partnerships

Hybrid Delivery Model

The Improving Student Outcomes through Industry Credentials, Employer Engagement and Business Partnerships is a 40-hour PIL and will be delivered through 12 one-hour online trainings and 28 hours of job embedded assignments. The course content includes three sections including: (1) Occupational Advisory Committees and Local Advisory Committees; (2) Accreditation of Career and Technical Education Program by a National Accreditation Agency and Student Achievement of Portable Industry Credentials; (3) Business Partnerships, Foundation Development and Employer Engagement. There are three job-embedded assignments after the completion of each section of the program.

There will also be three optional help sessions held during the PIL to review materials and assignments and allow participants to maintain contact with the instructor and facilitator to provide the maximum opportunity for participants to answer the essential questions, gain the knowledge and skills, and fulfill the competencies and job-embedded assignments. These are optional and not counted towards hours in the course.

New Director Academy – Part 1

Hybrid Delivery Model

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.

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New Director Academy – Part 2

Hybrid Delivery Model

The New Director Academy – Part 2 is a 30-hour PIL that will provide 14 hours of content that directly relates to the PIL Corollary Standard I: Creating a culture of teaching and learning with an emphasis on learning; and Corollary Standard III: Collaborating, communicating, engaging, and empowering others inside and outside the organization to pursue excellence in learning. The course content will be delivered through 10 hours of synchronous instruction and 20 hours of job embedded assignments focused on (1) Chapter 339; (2) Curriculum; and (3) School culture.

The culminating project will include: Discussion of how participants shared the vision for the plan; Strategies used to engage teachers and provide a collaborative work environment; Success and challenges experienced in implementing the change process and maintaining momentum of the change effort; Student achievement performance measures that were selected for the plan, as well as any other measures of success; How the change effort is being monitored for implementation; and How the school is celebrating success.

Using High-Quality CTSOs to Increase Student Achievement

Online, self-paced

Implementing High-Quality CTSOs to Increase Student Achievement is a 30-hour PIL and will be delivered through nine pre-recorded online lessons and 21 hours of job embedded assignments. The course content includes three-like topics: (1) increasing student participation in CTSOs; (2) increasing the quality of CTSOs through a broad range, annual Program of Activities or Work, and the selection of an effective CTSO advisor; and (3) Adding leadership and CEW skills to the career and technical Program of Study. Participants will complete a Concept Check Reflection Activity at the end of each session.

There are three job-embedded assignments after the completion of each section of the program. At the end of Section 1, participants will work with CTSO advisors and students to overcome deterrents to student participation and, as a result, increase the number of students gaining the academic, technical, leadership, and career education and work benefits of the CTSO. At the end of Section 2, participants will create a job description that identifies the administrative expectations of the role and responsibilities of the advisor. In addition, participants will collaborate with CTSO advisors to create and implement a range of activities (in addition to technical skill competition). At the end of Section 3, participants will collaborate with career and technical teachers, OAC members, and Board Members (JOC or otherwise) to include leadership and career education and work tasks in the local program task lists.

Using NOCTI Data to Improve Instruction

Hybrid Delivery Model

Using NOCTI to Improve Instruction is a 40-hour PIL that includes 18 contact hours: a seven-hour initial session; four two-hour online sessions; and a three-hour final report-out session.

There is four job embedded assignment that includes data-driven decision making strategies (22 hours): (1) create an action plan for using student achievement data to support instructional decision making; (2) plan and deliver a brief presentation covering the research-based strategies to improve student learning,

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student recall, and applying what students have learned to new situations; (3) create an analysis of student performance by program based on NOCTI pre-test results; and (4) create, implement, and assess the results of an administrative SLO based on the NOCTI dashboard.

Using the CTE Budgeting Process to Support Student Achievement Hybrid Delivery Model

The CTE Budgeting Process to Support Student Achievement is a 30-hour PIL delivered through synchronous online instruction and optional sessions, as needed. This PIL includes 14 hours of instruction and 16 hours of job-embedded assignments. The course content focuses on using student achievement goals to create the budget philosophy, program planning, performance accountability, phases of budgeting, effective use of fiscal (federal, state, and local) resources, budget management, and internal controls and presenting the budget to the Board and member school districts. The roles and responsibilities of the CTE director, administrators, teachers, business administrators, and the superintendent of record in budget development and management will be discussed. Business administrators are encouraged to attend with their school's administrator.

The culminating project includes three job-embedded assignments. The assignments are essential elements of every school's CTE operating budget: (1) Identify student achievement goals; (2) Analyze the school's current budget and make recommendations for funding student achievement goals; and (3) Develop a document illustrating the impact of funding student achievement goals through the general fund operating budget (functions and objects). Participants will deliver a brief presentation during the report-out session summarizing their priorities and budgetary changes designed to improve student achievement.

Additional PIL programs may be added during the year. All TAP schools will be eligible to register when announced.