

Consolidated Annual Report, Program Year 2015 - 2016 Pennsylvania

Step 3: Use of Funds: Part A

1. During the reporting year, did your state use Perkins funds to develop valid and reliable assessments of technical skills?

Yes

Pennsylvania developed and uses customized assessments aligned to the Pennsylvania developed program of studies. Currently we have 18 customized assessments. The methodology used by Pennsylvania to develop valid and reliable assessments of technical skills includes the Nedelsky Method and Angoff Method.

The goal is to have a secondary and postsecondary aligned assessment for each program of study. Currently there are 42 POS that have been completed. Pennsylvania developed statewide committees to examine the current NOCTI assessment that is aligned to the secondary portion of the POS. The assessment alignment effort identified national NOCTI assessments that are not aligned to the POS. Pennsylvania worked with NOCTI to customize assessments that align. There were 20 customized tests being utilized in 2015-16. One customized test was developed in 2015-16 to be used in 2016-17. A Career, Education and Work test was being used statewide.

The Bureau of Career and Technical Education has been evaluating enrollments and CIPs to maximize the number of students enrolled in CTE programs of study (POS) aligned to end-of-program testing. At this point, only 20% of CIPs did not have a test alignment. At the secondary level, Pennsylvania has aligned 66 of 82 CIP codes with skill attainment end-of-program tests. These tests are provided by the NOCTI and the National Institute of Metalworking Skills (NIMS). The CIPs aligned with NOCTI and NIMS tests include 98% of CTE enrollees.

NOCTI is the assessment provider for Programs of Study customized tests. Study Guides and Instructor Prep Packs are available for the customized assessments. Click the links below for assessment blueprints.

- Applied Horticulture
- Automotive Mechanics Technology
- Building/Property Maintenance
- Career Education and Work Standards
- Child Care and Support Services Management
- Commercial and Advertising Art
- Communication Technologies
- Computer Systems Networking
- Computer Technology/Computer Systems
- Cosmetology/Cosmetologist
- Drafting and Design Technology
- Electrical Power and Transmission Installers
- Electromechanical Engineering Technology
- Engineering Technologies/Technicians
- Heavy Equipment
- Highway Construction

- Homeland Security
- HVAC Maintenance Technology
- Management Information Systems
- Mason/Masonry
- Plumbing Technology/Plumber

At the postsecondary level research has determined that GPA is a valid and reliable methodology for assessing skill attainment so no further action is required.

2. During the reporting year, did your state use Perkins funds to develop or enhance data systems to collect and analyze data on secondary and postsecondary academic and employment outcomes?

Yes

For the 2015-16 data collection, the Department continued to use the Data Quality Engine (DQE) that was brought online during 14-15. Perkins funds were not used to develop or enhance the data systems during the 2015-16 program year. Annually the Department reviews the data collection system against the data requirements. Changes to the system were minimal such as updates to the industry certification list; therefore significant increases in the use of funds to develop or enhance data systems to collect and analyze data were not made during the 2015-16 program year.

Consolidated Annual Report, Program Year 2015 - 2016

Pennsylvania

Step 3: Use of Funds: Part B

1. During the reporting year, how did your state assess the career and technical education programs funded under Perkins IV?

The evaluation methodology includes both qualitative and quantitative methods. Programs are evaluated based on Perkins accountability measures, which also are used by Perkins recipients to determine effectiveness of their programs. The accountability measures are broken into the special populations categories, which include Nontraditional, Displaced Homemaker, Economic Disadvantage, Individual with Disability, Limited English Proficiency and Single Parents. The evaluation occurs annually and Department staff analyzes each Perkins recipient's impact on each of the special populations categories including meeting locally negotiated levels of performance.

As part of the annual local plan submission, each recipient is required to address special population's student academic performance, technical skill attainment, access to high-skill, high wage, high-demand education and training, and includes the categories of disabled, nontraditional, displaced homemaker, single parent, ELL and economically disadvantaged students. The recipients indicate how their use of funds assist students with implementing individual education plans, accommodating English Language Learners and those students who are economically disadvantaged. Staff then ensures each Perkins recipients' Local Plan addresses the areas of need.

Each Perkins recipient must annually submit a local plan, which requires each recipient to examine their school wide performance indicators and perform a root cause analysis of the indicators where they are not meeting negotiated levels. During the review of the indicators, the recipient considers action items and funding requests to ensure they address performance improvement.

For state program approval, each Perkins recipient's performance on accountability measures is also reviewed at the entity and program level. This review and analysis ensures the Perkins recipient is meeting the targets and allows the recipient to ensure the needs of each special populations category are being met. This method also allows the Department to determine if it needs to direct resources to address a category of special population to ensure all special populations' needs are being met.

The Department works with Pennsylvania Department of Labor and Industry in the identification of High Priority Occupations (HPO). Each program of study provides students the opportunity to prepare for employment in the HPO.

The Pennsylvania Department of Education visits recipients to ensure compliance with federal and state regulations. The regulations outline the expected standards of development, admission, and operation of quality career and technical education programs of study. The qualitative review ensures the Perkins recipients have designed the CTE programs to enable the special populations categories to enroll without discrimination and to prepare for further education and training in occupations that are aligned to Pennsylvania industry sectors. The industry sectors are those that are high skill and lead to family sustaining wages. The annual local plan submission also requires submission of assurance documentation and program performance report summary, specifically looking at program of study implementation and student pursuit of further education, training or employment in high priority occupations.

Each CTE program is required to have an advisory committee comprised of business, community and workforce. The Occupational Advisory Committee conducts a program evaluation once a year. Suggestions are considered and used to evaluate each program of study for performance improvement.

2. During the reporting year, how did your state develop, approve, or expand the use of technology in career and technical education?

For 2015-16, the Bureau of Career and Technical Education approved competitive equipment grants totaling \$1.8M state. The funds expanded the use of technology in CTE programs. The focus of the grant was on increasing academic proficiency, technical skill attainment, and increased alignment of CTE programs to industry certifications. Secondary and postsecondary Perkins recipients also used their local Perkins allocation to purchase state-of-the-art equipment to support student learning in CTE programs. Each recipient addresses academic integration with technical course content and alignment to high priority occupations as well as a description of how the instructors will receive training on the equipment.

In addition to the competitive state equipment grants, the 2015-16 Pennsylvania state budget provided school districts, and career and technical centers the opportunity to purchase equipment to better prepare students for what they will encounter in the workplace. The funds provided to school districts, and career and technical centers are based on a formula and supported programs that were aligned to the state's high priority occupations. The Bureau of Career and Technical Education approved state supplemental equipment grants totaling \$3M.

The Pennsylvania Workforce and Development Association (PWDA) is supported by PDE/BCTE. PWDA represents the regional workforce investment boards (WIB). The Bureau supports the annual PWDA Employment, Training and Education Conference. The Education Workforce Leadership Award was given in conjunction with the 2016 Pennsylvania Workforce and Development Association's Annual Conference on May 18-20, 2016. Eight Perkins recipients and non-recipients submitted nominations for the 2016 award. Most of the partnerships have been in existence for at least 5 years. This year the PDE/BCTE Education Workforce Leadership Award was presented on May 18, 2016 to the Central Pennsylvania Institute of Science and Technology of Pleasant Gap, PA and the Groff Tractor and Equipment Company, Inc., for an outstanding educational/industry partnership in the Diesel Mechanics Technology Adult Program.

Groff Tractor has been meeting customers' needs since 1958 when their first dealership opened in Highspire, Pennsylvania and later moved to Mechanicsburg. Today, Groff Tractor serves Pennsylvania, Maryland, New Jersey, Virginia and West Virginia with 11 locations spread across the region.

The Central Pennsylvania Institute of Science and Technology (CPI) opened its doors as a technical training center in 1969. Over the years, CPI has continuously expanded and has successfully offered a diesel technology program. With a long-standing, collaborative partnership between CPI and Groff Tractor and Equipment, Inc., a Heavy Diesel Construction – Case construction Emphasis Associate in Specialized Technology (AST) Degree Program, which is in the PDE final approval process, was created.

With branches in Pennsylvania, Maryland, and New Jersey, Groff's commitment to CPI is evident, as they have provided expertise in curriculum, content, and externship experience, are an important member of the CPI Diesel Technology Occupational Advisory Committee (OAC), and generously donated approximately \$100,000.00 worth of equipment, tools, and technology to the school. They also developed an equipment rotation arrangement at CPI so students have access to the newest heavy construction equipment that the industry offers.

Not only do the adult students interact with Groff employees when they visit the class as part of the career readiness component, they also visit their sites during the externship component of the AST degree program, thereby exposing them to sales, service, customer interaction, rentals, and fieldwork. By partnering with CPI, Groff is working to secure its supply of highly trained and capable diesel technicians over the long-term, thus eliminating the need for immediate training, saving time and money once they are hired, and increasing the likelihood of career advancement.

CPI has made transformative improvements to the diesel technician program and broadened its opportunities with other corporate partnerships in part due to the established partnership between CPI and Groff. This strong partnership continues to grow with a deep and lasting positive impact for students, CPI, Groff, and by extension – the local community.

Following the Governor's Award Luncheon the Central Pennsylvania Institute of Science and Technology of Pleasant Gap, PA and the Groff Tractor and Equipment Company, Inc. presented a PWDA Conference Session explaining the education/industry partnership from the initial establishment to future partnership plans. Forty-two people attended the conference session, which was very well received.

The Department sits on the Pennsylvania Apprenticeship and Training Council. This appointment allows the Department to discuss programs of study and connection to registered apprenticeship programs. There is continued discussion on expanding apprenticeship programs through connections to secondary and postsecondary CTE education providers.

The Department sits on the Pennsylvania Workforce Investment Board. The Pennsylvania Workforce Investment Board (PA WIB) is the Governor's principal private-sector policy advisory on building a strong workforce development system aligned with state education policies and economic development goals. The Pennsylvania WIB is aware of the Pennsylvania Core academic standards and the programs of study and has been supportive of both.

The Department has a partnership with the Pennsylvania Association of Career and Technical Administrators (PACTA). The partnership includes the Department's support and input into professional development that leads to viable professional development and technical assistance for instructors and administrators in CTE settings. PACTA representatives also serve on the Bureau's strategic planning committee and assist in identifying action steps the Bureau, with PACTA's assistance, can take to improve student academic and technical achievement, increase business engagement, develop K-12 pathways, serve special populations students, address academic and technical proficiency and expand career development.

3. During the reporting year, what professional development programs did your state offer, including providing comprehensive professional development (including initial teacher preparation) for career and technical education teachers, faculty, administrators, and career guidance and academic counselors at the secondary and postsecondary levels? On what topics?

The Department developed and implemented CTE teacher and administrator certification programs through contractual agreements with three state universities. Each university formed a Professional Personnel Development Center to focus on the CTE teacher and administrator certifications. The Centers were established and approved by the Pennsylvania State Board of Vocational Education on July 1, 1978. The Centers are located at Indiana University of Pennsylvania, The Pennsylvania State University and Temple University. The mission of each Center is to provide comprehensive regional personnel development opportunities that are specifically designed to prepare and update career and technical teachers, administrators and support personnel. During 2015-16, the Centers provided pre-service and in-service professional personnel development services for career and technical educators in the respective areas of the Commonwealth. Each university insures the certification programs are based on research and covers topics including curriculum development, integration, instructional practices, parental and community involvement, PDE initiatives, and current trends in education.

All teachers and administrators must hold either an instructional or vocational instructional certification in order to be employed in a secondary school entity. State standards exist for teacher preparation programs and the teacher preparation programs must align to state standards and ensure the certification programs meet state statutes or regulations. The three Professional Personnel Development Centers prepare CTE teachers and administrators and recommend them to the Department for certifications.

In all three regions of the state, Center staff meetings were held regularly to share "notes from the field" and discuss topics of interest to the school. Also, professional development experiences were developed on the basis of a comprehensive needs assessment with input from the following sources:

1. Advisory groups made up of volunteers from the group for which the experience is intended.
2. Evaluative data collected from previous participants in similar activities.

Professional development activities included:

1. Opportunities to acquire new knowledge and skills related to the instructors' occupational area so they are able to provide dynamic, cutting-edge CTE instruction.
2. Discussions related to educational delivery methods and instructional techniques.
3. Resources and current information on PDE-BCTE initiatives.
4. Collaborations and networking opportunities with other education professionals.

In addition, career and technical educators are provided with technical training on how to access, select, develop and implement curricula materials that support statewide programs of study and rigorous challenging programs; career pathways, scope and sequence of courses, in accordance with Chapter 339; industrial standards and articulation agreements; and, other state and federal mandates.

The professional development activities are designed to enhance the knowledge, academic integration proficiency, and skills or capabilities of career and technical instructors. For example, the following objectives were important in determining professional development programming:

1. Engage the teacher-learner, rather than rely on PowerPoint presentations.
2. When possible, conduct on-going group activities, rather than stand-alone workshops.
3. Create events that meet the needs of all teachers, including incumbents.
4. Promote teacher involvement in Domain 4 (Professional Responsibilities) of the PA Framework for Effective Educators.
5. Complement, but not duplicate, PDE BCTE initiatives and objectives of the Technical Assistance Program (TAP) or the Integrated Learning Conference.

The development of the Student Learning Objectives (SLO) for Career and Technical Education (CTE) teachers began February 2014 with the purpose to be utilized for CTE teacher evaluations in 2014-15. SLO development and implementation continue as important ingredients in the evaluation of career and technical education personnel during the academic year 2015-16. Creation, development, and ongoing implementation of SLOs are taught by the three Professional Personnel Development Centers. New teachers are well-versed in all aspects of SLOs by the time they have gained their initial vocational certificate. The SLOs are a mandated component of the Educator Effectiveness system.

The Department of Education, Bureau of Career and Technical Education conducts the annual Integrated Learning Conference: The School to Career Connection. This conference highlights academic and technical integration strategies. The 24th Annual Integrated Learning Conference was held at the Penn Stater Hotel and Conference Center, in State College, PA, on November 4-6, 2015. Over 75 concurrent sessions, 3 pre-conference workshops, and a variety of other meetings and professional development activities were scheduled to occur during the conference. In attendance were 450 participants. The participants included exhibitors, instructors, administrators, counselors, and postsecondary representatives. The conference was successful because the concurrent sessions were predominantly led by classroom instructors or personnel from the field. These individuals provide support and the showcasing of best practices for career and technical education programs that improve the academic, and the career and technical skills of students through the integration of academic standards with career and technical education.

The Department also sponsors the annual Pennsylvania CTE Conference (PACTEC). The focus of the conference is technical updating sessions designed for CTE instructors. Topics covered include student motivation, project based learning, nontraditional students, student engagement, postsecondary articulations and business partners.

4. During the reporting year, how did your state provide preparation for non-traditional fields in current and emerging professions, and other activities that expose students, including special populations, to high skill, high wage occupations?

In an effort to address Pennsylvania's secondary Perkins nontraditional indicators, the Bureau continues to work with the Pennsylvania State System of Higher Education, Temple University, and Indiana University of PA to provide STEM focused outreach to students in Pennsylvania during the 2015-16 year. Middle school students and their parents will learn about STEM careers and nontraditional career choices available to them in their local career and technology centers (CTC). Information about postsecondary articulations with CTCs will also be provided. Timelines for implementing the activities are hampered by the budget and may not occur this year.

STEM Academies -- Bloomsburg University of Pennsylvania submitted a proposal to the Pennsylvania Department of Education Bureau of Career and Technical Education (PDE BCTE) under the direction of Dr. Carol Adukaitis, Director, Educational Pathways Program, for funding to provide Advanced Manufacturing and STEM Academies during the last full week of school at 3 sites: Bethlehem Area Vocational Technical School held their Academy, June 1; The School District of Philadelphia, Benjamin Franklin High School, June 7; and South Philadelphia High School, June 8. Each Academy focused on high-priority occupations that articulate from their CTE to their local community college through the PDE SOAR (Students Occupationally and Academically Ready) Program. Students, counselors and teachers attending the Academies learned that the community college associate degree transfers to the Bloomsburg University Bachelor of Applied Science Technical Leadership (BASTL) degree offered at the Pennsylvania State System of Higher Education (PASSHE) Center City Philadelphia campus. Thus STEM Academy attendees would learn that a college career pathway exists from the career center to the community college to Bloomsburg University right in Philadelphia.

1. Bethlehem Area Vocational Technical School (BAVTS) - Forty students participated in the STEM vs. Zombie Apocalypse event. The day started with a brief video of an imaginary virus spread by zombies to set the mood. Zombie Apocalypse was chosen as the theme for the Academy to entice middle school students to attend. At the conclusion of the video, students were divided into teams of 4- 5 and were handed black backpack Zombie Survival Kits. Teams rotated through four different program areas: Health Careers, Carpentry and Plumbing, Electronics and Engineering, and Technology Integration. In each career area, a problem related to the apocalypse virus was presented. The students in each team needed to act as a team, decide how to solve the problem with the supplies from their different backpacks. The goal was team building and problem solving by consensus.

2. Benjamin Franklin Center for Advanced Manufacturing – Sixty-nine students rotated through four Advanced Manufacturing Academies and a Food Service/Culinary program to provide each student an opportunity to participate in a non-traditional program. Examples of student activities included using a virtual welding machine, building a simple drawbridge using principle of hydraulics, precision engraving on metal strips, and touring a professional culinary kitchen.

3. South Philadelphia High School – 144 students rotated through eight career pathway programs to provide each student an opportunity to participate in a non-traditional program. Students learned about robotics and manufacturing, treatment of concussions and other healthcare issues, food sanitation, graphic design software, and home construction.

5. During the reporting year, how did your state provide support for programs for special populations that lead to high skill, high wage and high demand occupations?

The process developed in Pennsylvania includes the annual evaluation of CTE programs, regional meetings with CTE Administrators and Perkins postsecondary representatives. Annually, each recipient is required to address student academic performance, technical skill attainment, and access to high-skill, high wage, high-demand education and training. All recipients retain documentation related to specific questions in sub-section 124(b)1, of PDE/BCTE's Perkins on-line Local Plan applications. The recipients utilize staff positions, equipment purchases, and professional development for teachers and para-professionals to assist all students that includes the student who is economically disadvantaged, has limited English proficiency, has disability and is a displaced homemaker and single parent.

BCTE supports the annual conference conducted by the Pennsylvania Association of Career and Technical Education Special Populations (PACTESP). The purpose of the conference is to provide professional development to CTE and regular education personnel to increase and align support and services to special populations students. Sessions are designed for secondary and postsecondary settings. PACTESP holds an annual conference on Perkins IV special populations' issues. BCTE provides updates including updates on high priority occupations and the relationship to CTE secondary and adult programs.

BCTE continues to work with the Pennsylvania Association of Career and Technical Administrators to develop and offer targeted technical assistance that is focused on improving the performance indicators associated with special populations, specifically nontraditional and student with disabilities. The technical assistance is designed for administrators with CTE programs and assists them in examining local data to determine gaps in performance of special populations' categories.

BCTE continues to sit on the State Leadership Transition Committee. An interagency MOU exists with participating state agencies in cooperation with the Bureau of Career and Technical Education Bureau of Special Education. The Transition Committee continues to work with the Local Transition Coordinating Councils (LTCC) to strengthen the councils. There are 70 LTCC across Pennsylvania. The councils hold interagency meetings to identify potential supports and services for transitioning students.

6. During the reporting year, how did your state offer technical assistance for eligible recipients?

The Department provides technical assistance to eligible recipients that are focused on leadership at the local level. The Department supports three professional development centers, which prepare teachers and administrators for certification. The three centers provide in-service professional development and pre-service professional development programs for new teachers. These professional development in-service programs are based on needs assessment surveys that are regularly distributed by the Centers. After the needs of the region are determined, the Center prepares and executes professional development programs that reflect those needs. The pre-service professional development programs are the result of a research analysis and the implementation of best practices into the New Teacher Workshops that are conducted each year. Pertinent and relevant professional development activities that are fundamental in the growth and maturation of professional educators, are presented by the Centers at the New Teacher Workshops. These activities are designed to empower and to enable the fledgling teacher to grow professionally in the field of education. Simulation exercises, direct instruction, and online resources are all employed by the Centers, in order to present such professional development activities to new teachers. The Department also works with the Career Development Leaders Network (CDLN) to address the needs of teachers, administrators and counselors in regard to career education. CDLN is an advisory committee supported by the Department and includes guidance counselors from each grade level and administrators interested in supporting state career counseling activities.

In addition, regional Perkins workshops are held for secondary and postsecondary recipients that provide guidance on the online application, performance data, follow-up survey, local negotiations, leveraging funding sources, and nontraditional participation and completion. Technical assistance is provided to the recipients and is focused on developing programs of study, integrating academics into CTE curriculum, and implementing statewide articulation agreements and programs of study (SOAR) workshop was held September 22, 2015.

The Department continues to collect best practices and post these on the Department's website. The Department also worked with the Pennsylvania Association of Career and Technical Administrators to develop a new website, www.pacteresources.com website. Each Perkins recipient, secondary and postsecondary, describes in their Local Plan application strategies that lead to program improvement. Key strategies include: Literacy and Numeracy Integration, Instructional References (websites, books, etc.), Cross-Curricular Linkages, Targeted Professional Growth, Strengthening Student Performance, Teacher Evaluation, Student Support and Guidance, Team Building, Standardized and Aligned Curriculum, Systemic Change, Data-driven Programs, Assessment-based Instruction, Stakeholder Engagement, Education Partner Development and Eligible content Instruction. The best practices can be used by the local recipients to improve instruction, curriculum, data collection and student services.

The plan and services for the eighth year of the Technical Assistance Program (TAP) 2015-2016 school year were implemented. The TAP was established to assist career and technical education instructors and administrators at career and technical centers to improve student academic and technical achievement. Participation has been voluntary. Professional development and technical assistance has been coordinated with various groups and include: (a) enhanced CTE, which includes problem based learning a student centered and process oriented approach; (b) increasing quality of instruction; (c) literacy implementation in the CTE classroom; (d) Pennsylvania Inspired Leadership programs for administrators (business/community engagement, new directors' academy, curriculum leadership, principal leadership, educator effectiveness); (e) developing and assessing 21st Century skills; (f) curriculum development assistance; (g) provision of NOCTI preassessments and study guides and professional development on how to use the data and guides; (h) coaching for administrators; and (i) support for instructional coaches.

Specific sessions included the Seven Essential Teaching Skills for the 21st Century. The session covers the unique challenge facing CTE instructors including engaging increasingly diverse student populations in learning the technical, academic and 21st Century knowledge and skills necessary for success in further learning. Another session is the Enhanced CTE Assignments and involves guiding CTE instructors in the development of authentic projects for each of the program areas. The projects provide descriptions that identify the technical skills aligned with Pennsylvania core standards, the technical skills that will be embedded in each of the projects and the applicable 21st Century skills.

In addition to the technical assistance offered through the TAP, the Department also provides NOCTI pre-assessments and Study Guides. NOCTI Pre-Assessments provide CTE programs 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 the students. Using Study Guides to target the identified curriculum areas for remediation throughout the school year will ultimately improve student performance on the end-of-program assessment. Study Guides contain information on both the written and performance portions of the end-of-program assessment including an overview of the assessment which shows percentages of each duty covered and study checklists for each duty in the written and performance portions of the assessment.

7. Serving individuals in state institutions

Part I: State Correctional Institutions

Amount of Perkins funds used for CTE programs in state correctional institutions:

354578

Number of students participating in Perkins CTE programs in state correctional institutions:

317

Describe the CTE services and activities carried out in state correctional institutions.

Number of students participating in Perkins CTE programs in state correctional institutions:

Rockview (Masonry) 36 enrolled 23 completed

Waymart (Business Ed.) 180 enrolled 79 completed

Cambridge Springs (Custodial Maintenance) 45 enrolled 31 completed

Carbon Lehigh IU enrolled 32 students; 29 students earned industry certifications

Annually, 1% of the Perkins program allocation is provided to the state corrections facilities in order to serve youth in Pennsylvania's detention/corrections facilities. The funds support instructional staff at three state correctional institutions (SCI) and Carbon-Lehigh Intermediate Unit #21. The SCI's and the IU provide career and technical education that leads to trade-based certifications in programs that offer employment opportunities in high demand occupations throughout Pennsylvania. Both provide occupational training, applied academics, employability training, and assessment with the goal of improving the youths' chances of finding employment upon release.

Part II: State Institutions Serving Individuals with Disabilities

Amount of Perkins funds used for CTE programs in state institutions serving individuals with disabilities:

0

Number of students participating of Perkins CTE programs in institutions serving individuals with disabilities:

0

Describe the CTE services and activities carried out in institutions serving individuals with disabilities.

The Bureau of Corrections Education provides supplemental education services for adults in career and technical education programs and also provides special educational services and Title I services to inmates who have been identified as requiring special needs. However, during the 2015-2016 reporting year, there were no inmates served with disabilities in any of the three state correctional institution programs.

The regulation reads as follows: Sec. 112(a)(s)(A) an amount equal to not more than 1 percent of the amount allotted to the State under section 111 for the fiscal year shall be made available to serve individuals in State institutions, such as State correctional institutions and institutions that serve individuals with disabilities.... All funds support the State correctional institutions and are not utilized at institutions that serve individuals with disabilities and the Department does not have information to provide for this section of the report.

8. During the reporting year, did your state use Perkins funds to support public charter schools operating career and technical education programs?

Yes

Pennsylvania has one charter school with Department approved career and technical education programs. The charter school now has six approved programs of study. As a grant recipient, the charter school must submit a local plan application, meet all required uses of funds, and meet accountability performance levels. Staff provided technical assistance to the charter school regarding Perkins requirements. The charter school also participates in the Technical Assistance Program. The charter school CTE instructors are part of the pre-service and in-service vocational instructional certification programs supported by the Department.

9. During the reporting year, did your state use Perkins funds to support family and consumer sciences programs?

Yes

Major initiatives and activities that support the Family and Consumer Sciences (FCS) Programs included training and professional development for instructors to prepare students to sit for the Child Development Associate (CDA) - READY certificate and the scholarship monies that are available if the schools use Keystone STAR facilities. In cooperation with Pennsylvania State University, Temple University and Indiana University of Pennsylvania, Family and Consumer Sciences teachers received training in Financial Literacy, by the Federal Reserve, Molecular Gastronomy. Professional development is also aligned to industry certifications. As a result, 9 instructors were certified with the Serve Safe Certification.

10. During the reporting year, did your state use Perkins funds to award incentive grants to eligible recipients for exemplary performance or for use for innovative initiatives under Sec. 135(c)(19) of Perkins IV?

No

11. During the reporting year, did your state use Perkins funds to provide career and technical education programs for adults and school dropouts to complete their secondary school education?

No

13P. During the reporting year, did your state use Perkins funds to provide assistance to individuals who have participated in Perkins assisted services and activities in continuing their education or training or finding appropriate jobs?

No

Consolidated Annual Report, Program Year 2015 - 2016

Pennsylvania

Step 3: Use of Funds: Part C

1. During the reporting year, how did your state provide support for career and technical education programs that improve the academic and career and technical skills of students through the integration of academics with career and technical education?

The Department of Education, Bureau of Career and Technical Education conducts the annual Integrated Learning Conference: The School to Career Connection. This conference highlights academic and technical integration strategies. The 24th Annual Integrated Learning Conference was held at the Penn Stater Hotel and Conference Center, in State College, PA, on November 4-6, 2015. Over 75 concurrent sessions, 3 pre-conference workshops, and a variety of other meetings and professional development activities were scheduled to occur during the conference. In attendance were 450 participants. The participants included exhibitors, instructors, administrators, counselors, and postsecondary representatives. The conference was successful because the concurrent sessions were predominantly led by classroom instructors or personnel from the field. These individuals provide support and the showcasing of best practices for career and technical education programs that improve the academic, and the career and technical skills of students through the integration of academic standards with career and technical education.

The Department works on ensuring that the approved career and technical education programs are aligned with the CIP codes that the state has adopted. Program approvals are based on the local schools' technical and academic scope and sequence, and its alignment to a CIP description. Additionally, the Department works with the secondary instructors and postsecondary faculty and business/industry representatives to develop statewide technical task grids that must be taught as part of the POS. Postsecondary faculty ensures the secondary and postsecondary technical coursework are aligned. Postsecondary faculty award college credits to the secondary students for the secondary technical coursework based on the alignment.

The development of the statewide technical task grids includes the identification of the Pennsylvania Core Academic standards. The programs of study are revised every three years. The statewide technical task grid and the crosswalk to the Pennsylvania Core Academic standards are revised.

The Department also provides technical assistance to the schools in regard to improving student achievement on academic and technical skills assessments. The technical assistance provided is described in previous sections of the CAR narrative and includes activities such as sharing of best practices regarding academic and technical achievement, integration of CTE and academic content, use of data to inform instructional decisions and developing projects that include alignment of technical content to academic content.

2. During the reporting year, how did your state support partnerships among local educational agencies, institutions of higher education, adult education providers, and, as appropriate, other entities, such as employers, labor organizations, intermediaries, parents, and local partnerships, to enable students to achieve state academic standards, and career and technical skills.

The Agency supports partnerships in a number of ways and includes partnerships with business and industry and between secondary and postsecondary providers. The focus of the partnerships is on improving student academic and technical skill attainment levels.

The Bureau supports the Pennsylvania Automotive Association Foundation that provides an annual student competition. The event committee designs five (5) workstations that can include: Automotive Alignment, Electrical Systems, Brake Systems, Waveform Measurement, and Information Systems; and processing a new car delivery with troubleshooting for vehicle faults is typically part of the competition. The ten highest scoring schools in the PAA western and central regions are determined and a school team is selected based on the written test scores of the two top students in each school. The top ten schools in the western and central regions participate in the PAA Automotive Competition event. The 2016 first place secondary school in the PAA Automotive Competition event later went on to finish in sixth place in the New York International Auto Show held in Manhattan in April 2016. The National Automotive Technology Competition is the auto industry's largest school-to-work initiative, which has the nation's best high school automotive career and technical education students compete against one another for the title of "America's Top Technician."

The Pennsylvania Automobile Association Foundation's Automotive Instructor's Conference was not held this year. Instead, the PAA kept all instructors abreast of any changes through the monthly PAA Service Update along with free access to the www.vehicletechusa.com. This is a site dedicated to helping Technicians, Service Managers and Instructors.

VehicleTechUSA.com is an online resource combining information from the PA Inspection Manual, Safety and Emissions Bulletins, PAA Service Updates, Title 67 and Title 75 regulations, and industry knowledge to help everyone understand the rules and regulations dealing with vehicle safety inspections and how to use the information efficiently. This site provides information related to inspection categories and assists automobile technicians to understand what is expected of safety inspection personnel today. PAA does all the research to provide auto mechanics and auto mechanic instructors with the latest rules and regulations, enabling the repair facility to properly complete Pennsylvania Safety and Emission Inspections.

Statewide Articulation Agreements are established in automotive technology programs of study that award advance credits to qualifying secondary program completers of SOAR automotive technology programs. The Department holds current Statewide Agreements with the following nine (9) postsecondary institutions: Community College of Allegheny County, Community College of Philadelphia, Delaware County Community College, Harrisburg Area Community College, Johnson College, Luzerne County Community College, Northampton Community College, Pennsylvania College of Technology and Thaddeus Stevens College of Technology. Knowing the various postsecondary articulation opportunities better prepares automotive instructors to provide postsecondary guidance and program of study information to their secondary school students who wish to pursue postsecondary training in automotive mechanics technology upon graduation from high school.

Additionally, the Department has established two Pennsylvania CTE Out-of-State Agreements in Automotive Technology with the Allegany College of Maryland (ACM), Cumberland, MD. The Pennsylvania CTE Out-of-State Agreements allow for the awarding of twelve (12) postsecondary credits in the ACM program of study CIP 47.0604 Automotive Technology Certificate Program and the Associate of Applied Science Degree Program, when Pennsylvania students successfully complete the CIP 47.0604 Automobile/Automotive Mechanics Technology Technician secondary program of study.

The Pennsylvania Workforce and Development Association (PWDA) represents the regional workforce investment boards (WIB). The Bureau supports the annual PWDA Employment, Training and Education Conference. The Education Workforce Leadership Award was given in conjunction with the 2016 Pennsylvania Workforce and Development Association's Annual Conference on May 18-20, 2016. Eight Perkins recipients and non-recipients submitted nominations for the 2016 award. Most of the partnerships have been in existence for at least 5 years.

The Department sits on the Pennsylvania Apprenticeship and Training Council. This appointment allows the Department to discuss programs of study and connection to registered apprenticeship programs. There is continued discussion on expanding apprenticeship programs through connections to secondary and postsecondary CTE education providers.

The Department sits on the Pennsylvania Workforce Investment Board and various subcommittees. The Pennsylvania Workforce Investment Board (PA WIB) is the Governor's principal private-sector policy advisory on building a strong workforce development system aligned with state education policies and economic development goals. The Pennsylvania WIB is aware of the Pennsylvania Core academic standards and the programs of study and has been supportive of both.

The Department has a partnership with the Pennsylvania Association of Career and Technical Administrators. The partnership leads to viable professional development and technical assistance for instructors and administrators in CTE settings. This also includes developing resources that assist CTE administrators to engage the community and business partners with the educational program offerings.

3. During the reporting year, did your state use Perkins funds to improve career guidance and academic counseling programs?

Yes

Career guidance and academic counseling programs are supported by Pennsylvania state funds. Staff salaries are supported by Perkins funds and staff time is devoted to these activities.

Career Development Leadership Network

The Bureau supports and maintains a statewide Career Development Leadership Network (CDLN). The CDLN is responsible to advise the Bureau in the area of career guidance and counseling. The committee meets quarterly and is made up of professionals from around the state in the areas of higher education, secondary, middle, elementary, business, and workforce development. The goal is to help counselors to assist students in making informed career decisions and in selecting appropriate academic and CTE coursework that enables them to achieve their career goals. The committee members are responsible for providing updated materials related to the Career Education and Work (CEW) standards toolkit website, which is available at <http://www.education.pa.gov/k-12/pacareerstandards/Pages/default.aspx#tab-1>. The lesson plans and toolkit are designed to be used by counselors, career coaches and instructors with the goal to assist students in making informed career decisions.

The Bureau continues to support the PACareerZone website to assist teachers, students, parents and the public. This website is a career exploration resource for use in the classroom by students and job seekers interested in finding information on careers. PACareerZone is a web-based career exploration and planning system. It is a user-friendly, interactive tool to find information on 900 high priority occupations in Pennsylvania. Students complete a self-assessment to determine their likes and dislikes that relate to job tasks and personality traits. Once the assessment is completed, the software aligns those likes to job clusters. The students can further research the cluster to find a job title that they are interested in and continue their research to learn more about the job tasks, job labor market in Pennsylvania, salary, educational needs and postsecondary programs and scholarship opportunities. The website is: www.pacareerzone.com.

The Bureau developed tools for counselors to use for planning a comprehensive school career counseling program. The tool demonstrates that school counseling programs and school counselors are integral members of the school academic team in raising achievement, meeting school goals and preparing Pennsylvania students for college and career success. The “Tools for Developing a Comprehensive K-12 Guidance and Counseling Plan” has thirteen basic steps to lead schools through a process to meet the requirements in Pennsylvania. The Department provides technical assistance to school districts as they develop their K-12 career counseling plans.

Comprehensive K-12 Guidance Plans are submitted to the Department. Several plans for use by all educational entities in Pennsylvania are listed on the www.pacareerstandards.com website.

In addition, three student learning objectives (SLO) drafts have been developed for counselor use to convey the Career Education and Work Standards—Career Awareness (grade 5), Career Exploration (grade 8), and Career Acquisition (grade 11). The draft SLOs are available on the Standards Aligned System (SAS) website. SLOs are detailed instructional tools created by the teacher with administrator input, to be used as a means to evaluate the teacher based upon student performance of the established objectives.

The Bureau worked with the Southern Regional Education Board to pilot professional development to school counselors, lead academic instructors and CTE instructors regarding counseling for careers. The schools willing to pilot the professional development developed a strategic plan that covered an advisement section, covered at least six grade levels, 5-16, and included transition and career exploration lessons and activities allowing every student to create a personalized education and career plan. Ten schools piloted the professional development.

4. During the reporting year, did your state use Perkins funds to establish agreements, including articulation agreements, between secondary school and postsecondary career and technical education programs to provide postsecondary education and training opportunities for students?

Yes

Staff salaries are supported by Perkins funds and staff time is devoted to these activities.

The statewide articulation agreement is found online and is an agreement between the Department and the Perkins postsecondary entity. Articulation for advanced credit transfer is made possible when Perkins-allocated postsecondary institutions and Pennsylvania secondary schools offering SOAR programs agree to the terms and conditions stated in the Perkins Statewide Articulation Agreement. This agreement outlines the general agreement conditions between secondary and postsecondary institutions and student qualification measures allowing for the student to acquire postsecondary education credits leading to an industry-recognized credential or certificate at the postsecondary level or an associate or baccalaureate degree.

The Program of Study (POS) ensures that the secondary planned academic and technical courses are aligned to the postsecondary general education and technical courses, bound by a PDE approved statewide articulation agreement. A BCTE Perkins Program of Study Statewide Articulation Agreement (Agreement) was released by the Agency on July 7, 2009. By developing statewide technical standards aligned to industry expectations and aligning to 11th grade academic standards, students are able to earn college credit for the secondary career and technical education coursework. Students can earn between 2 to 22 college credits, depending upon the specific program of study due to the Perkins IV Statewide Articulation Agreement.

The Agency has 458 postsecondary statewide Perkins statewide articulation agreements reported across 42 POS for a total of 1,505 agreements with secondary programs. The course/credit alignment reported on a website located at www.collegetransfer.net. For program year, 2015-16, 28 postsecondary institutions reported credit alignment in various PDE developed POSs. Some postsecondary institutions have aligned credit opportunities with as many as twenty-six different POSs. As postsecondary faculty continue to make program to program credit alignments, the transfer and articulation information for PDE/BCTE POS is listed on the college transfer website: www.collegetransfer.net. If credits are aligned to a commonwealth community college partner, the information can also be found on the Pennsylvania Articulation and Transfer Center at www.PATRAC.org

An Agreement amendment was enacted by PDE/BCTE on June 1, 2011. The Agreement amendment further defines transfer credit awarding and waiver processes to be used by Perkins-Allocated Postsecondary Institutions in order to meet the measures of full compliance. All Perkins-Allocated Postsecondary Institutions met the measures of full compliance on June 30, 2013.

Department Staff presented the Students Occupationally and Academically Ready (SOAR) Career and Technical Programs of Study Initiatives at four state conferences in 2015-2016.

The first presentation occurred at the 24th Annual PDE/BCTE Integrated Learning Conference, held November 4-6, 2015. During the conference, a School Improvement/Program of Study strand of eight (8) workshops was provided to conference attendees. The Programs of Study strand focused on the components of this progressive sequence of activities that aligns secondary education with postsecondary education to adequately prepare students for postsecondary success. The Programs of Study strand included workshops in the following areas: SOAR Program Development and Growth in PA, Project Based Learning in CTC Classrooms, Integrating a Contemporary and Multi-cultural English 12 Literature Curriculum, Curriculum Development Beyond the CTE Programs of Study, Creating SOAR Partnerships with Postsecondary Institutions, Best Practices in Student Engagement with Programs of Study, TED- Technology, Entertainment, and Design incorporating literacy based instruction into the CTE classroom, and SOAR Programs Statewide Articulation Updates. The strand was successful in drawing 256 conference participants, averaging 32 participants per session.

The second presentation occurred at the 26th Annual Symposium of the Pennsylvania Association of Career and Technical Administrators entitled: Pathways to Career Readiness on February 10, 2016. This session presented an overview of the Pennsylvania Department of Education's Students Occupationally and Academically Ready (SOAR) Programs of Study Initiative. The session provided web-based resources to learn more about the SOAR Programs Initiative, discussion of programs of study development and revision, student documentation needed to qualify for postsecondary credit under the terms and conditions of the Perkins IV Statewide Articulation Agreement.

The third presentation occurred at the PA Workforce Development Association's 32nd Annual Employment, Training and Education Conference held on May 18, 2016 at the Hershey, PA. This session presented an overview of the Pennsylvania Department of Education's Students Occupationally and Academically Ready (SOAR) Programs of Study Initiative. Beginning in 2008, the Pennsylvania SOAR Program Initiative has currently developed 41 Career and Technical Education Programs of Study. SOAR Programs include the opportunity for a qualifying student to earn postsecondary course credit(s) through the PDE statewide articulation agreements established with 42 postsecondary institution partners located in PA, NY, and MD. The session provided web-based resources to learn more about the SOAR Programs Initiative through the Pennsylvania Articulation and Transfer Center at www.PAcollegetransfer.com and the PA Bureau of Career and Technical Education Program of Study Search Engine at www.collegetransfer.net. The session concluded with a discussion of marketing materials and efforts to inform guidance counselors, parents, and secondary students of the SOAR Programs Initiative.

The fourth presentation occurred at the PDE Data Summit 3rd Annual Conference held on May 24, 2016 in Hershey, PA. BCTE/PDE Staff presented a session on Perkins Postsecondary PIMS data and Perkins Statewide Articulation Agreement Updates. The session will provided guidance and resources to learn more about the SOAR Programs Initiative and key data elements addressed in the Perkins Postsecondary PIMS Data Collection.

The Pennsylvania Information Management System (PIMS) Perkins Postsecondary Institution Collection for academic year (AY) 2015-2016 was completed recently. One area of data collected is the Program of Study Articulated Credit (POS AC) data. This data is submitted by the Perkins Postsecondary Institutions to report the total students formally granted Program of Study Articulated Credits based on qualifying secondary education performance and subsequent enrollment in the Postsecondary Articulated Program. Students awarded the postsecondary credits have met all student qualification measures in the PDE-approved secondary program of study known as the Students Occupationally and Academically Ready (SOAR) Program, The student qualification measures are defined under the Perkins Statewide Articulation Agreement (Agreement).

In AY 2015-2016, a total of 63 students were awarded SOAR Program of Study Articulated Credit and 392 total postsecondary credits were awarded. Forty-nine (49) students were reported in the Pennsylvania Information Management System (PIMS) by Perkins-Allocated Postsecondary Institutions as receiving SOAR Programs of Study articulated credits. A total of 354 Postsecondary course credits were awarded to qualifying students. Also, fourteen (14) students received SOAR Program of Study articulated credits as reported by Perkins-Allocated Career and Technical Education Centers offering the Licensed Practical/Vocational Nursing Program. A total of 38 college credits or 570 equivalent clock hours of instruction awarded were awarded among the fourteen qualifying students.

The total dollar value of the 392 credits awarded in AY 2015-2016 is \$89,697. The credits were awarded to qualifying students matriculating into aligning Perkins -Allocated Postsecondary Programs of Study identified in the various Perkins IV Statewide Articulation Agreements. This dollar amount is based upon Perkins-Allocated Postsecondary Institutions current per credit hour tuition cost. Included in the total dollar value tabulation are the computed reporting community college tuition rates using the average cost per credit hour charged.

Also included in the total dollar value is \$4,560.00 of postsecondary credit awarded by the Pennsylvania Career and Technical Education Centers tabulated by a 1,500 hour average Licensed/Practical Vocational Nursing Program at \$12,000 average for the Licensed Practical/Vocational Nursing program tuition cost.

The dollar amounts listed above do not include additional savings for students in campus fees, books, lab equipment/materials, campus commuting and/or on-campus living expenses.

In terms of cumulative data collected by the Department over the last five AY years in Programs of Study Articulated Credit (POS AC), one hundred and fifty-two (152) students have been awarded SOAR program credit since 2011 thru the Perkins IV Programs of Study Articulation Agreements.

Since 2011, there have been 1,001 postsecondary credits awarded to qualifying SOAR Program students. The cumulative total dollar value of \$255,559.00 in Program of Study postsecondary credit has been awarded since 2011.

Two regional-level workshops were held across the Commonwealth during year 2015-16. The workshops addressed POS development, POS frameworks, articulations, student documentation, dissemination and marketing, and career pathways. Audiences for these workshops included secondary school and postsecondary institution administration, guidance personnel, school board members, and CTE instructors. The two regional- level POS/Curriculum Planning workshops were held at the following venues: Eastern PA Regional Curriculum and Program Planning Workshop held at the Lehigh Carbon Community College, Schnecksville, PA on April 29, 2016; and the Western PA Regional Guidance Counselors Workshop held at the Indiana University of PA Northpointe Campus, Freeport, PA, on October 14, 2015.

A BCTE Programs of Study Out-of-State Articulation Agreement (Agreement) was approved by the Agency on January 11, 2010. The purpose of this Out-of-State Agreement is to ensure that students make the transition from a Pennsylvania Secondary School to an out-of-state postsecondary institution without experiencing delays in or duplication of learning. The further purpose of this Agreement is to ensure that matriculated students are awarded college-level credit or equivalent clock hours toward the completion of the approved PDE POS, leading to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree. This Agreement sets forth the terms and conditions for the awarding of college-level credit or equivalent clock hours to students who complete the approved PDE POS at a Pennsylvania secondary school so that those students can seamlessly continue their education in a related POS at an out-of-state postsecondary institution.

To date, out-of-state articulation agreements have been signed in New York State University of New York SUNY/ Cobleskill Campus and the Allegany College of Maryland. Program of Study CIPs where out-of-state articulation agreements have been established include 01.0201 Agricultural Mechanization and 47.0604 Automobile/Automotive Mechanics Technology/Technician.

5. During the reporting year, did your state use Perkins funds to support initiatives to facilitate the transition of sub baccalaureate career and technical education students into baccalaureate programs?

Yes

Staff salaries are supported by Perkins funds and staff time is devoted to these activities.

For 2015-2016, the Bureau of Career and Technical Education has established Program to Program articulation. The Agreements allow students who pursue the programs areas offered in secondary schools and also matriculate to Perkins-Allocated Postsecondary Institutions, which may lead to an Associate's Degree or a BS degree.

The program areas allowing such career pathway opportunities include: Accounting, Allied Health Technology, Automotive Mechanics Technology, Auto Body Collision Repair, Baking and Pastry Arts, Carpentry, Computer Systems Technology, Culinary Arts, Electrical Technology, Heating, Ventilation, Air-Conditioning Technology, Health Services Management, Hospitality Management, Masonry, Machine Tool Technology, Nanofabrication, Plumbing, and Web Design, and Welding.

Additionally, program-to-program Agreements at two postsecondary institutions, one Perkins Allocated (Pennsylvania College of Technology) and one Out-of State Postsecondary Institution (the State University System of New York/ Cobleskill), allow the credits attained in the Associate of Science Degree to transfer to the Bachelor of Science Degree in areas of Agriculture Business Management, Agricultural Mechanization, and Masonry.

As indicated in an earlier section of the report, a BCTE Programs of Study Out-of-State Articulation Agreement (Agreement) was approved by the Agency on January 11, 2010. One purpose of this Agreement is to ensure that matriculated students are awarded college-level credit or equivalent clock hours toward the completion of the approved PDE POS, leading to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree.

Pennsylvania continues to work with NOCTI and the National College Credit Recommendation (NCCRS) in regard to college credit awarded for level of performance on the Pennsylvania specific end-of-program technical skill assessments. NCCRES reviews the assessments and determines if college credit can be awarded. One example is the Building Construction program assessment, in the lower division baccalaureate/associate degree category, 1 semester hour in Building Trades or Methods and Materials will be awarded. An additional 1-2 credit may be awarded based on successful completion of the Performance Component when given in conjunction with the written proficiency examination.

6. During the reporting year, did your state use Perkins funds to support career and technical student organizations?

Yes

In 2015-2016, BCTE committed \$51,672 in federal funding to support CTSO programs. Through this support, the Bureau gives assistance to career and technical student organizations (CTSO) by providing for curricular activities that enhance the quality of student leadership training at secondary and collegiate levels.

Additionally, BCTE has staff dedicated to support each of the CTSOs. The CTSO staff work with the executive boards of the related CTSO and assist with coordinating regional and state skills conferences and when applicable assist with the national skills conferences. CTSO staff are 100% state funded positions. Current state regulation requires each approved secondary CTE program to include CTSOs as part of the curriculum. All approved CTE programs must include human relations skills, knowledge of occupations, leadership competencies and positive attitudes toward fulfilling occupational, civic, social and community responsibilities. Pennsylvania recognizes eight student organizations that provide career awareness, leadership, motivation, and recognition for career related skills. The CTSOs are an extension of the classroom instructional program and are required to integrate academics and career and technical skills into project-based experiences.

7. During the reporting year, did your state use Perkins funds to support career and technical education programs that offer experience in, and understanding of, all aspects of an industry for which students are preparing to enter?

Yes

All local plans include all aspects of an industry with each Perkins recipient responding how they use Perkins funds to support all aspects of an industry. Activities include but are not limited to, purchasing equipment (recommended by occupational advisory committees) that is being used in industry; incorporation of job shadowing; including field trips/site visits to business related to program area; incorporating internships; externships, pre-apprenticeships and industry mentoring programs; and the use of cooperative education.

8. During the reporting year, did your state use Perkins funds to support partnerships between education and business, or business intermediaries, including cooperative education and adjunct faculty arrangements at the secondary and postsecondary levels?

No

9. During the reporting year, did your state use Perkins funds to support the improvement or development of new career and technical education courses and initiatives, including career clusters, career academies, and distance education?

Yes

Pennsylvania continues to develop Programs of Study to ensure secondary and postsecondary students are enrolled in challenging academic and technical coursework. As part of the Perkins IV Programs of Study (POS) mandate, the BCTE continues to advance the POS initiative by having Perkins–allocated postsecondary institutions offer advanced credit opportunities to students qualifying under the conditions stated in the Perkins IV Programs of Study Statewide Articulation Agreement. Students can earn collegiate credits depending on the POS selected and the partnering agreement made with PDE and the postsecondary institution. Students do not have to pay for the college credit earned as part of the POS.

Currently there are 42 POS that the Department has developed with over 1,515 POS approvals at the secondary schools. BCTE holds 458 Postsecondary Statewide Articulation Agreements (Agreements) signed with 28 Perkins-allocated postsecondary institutions plus 14 Career and Technical Centers offering Practical Nursing Adult Programs.

The Pennsylvania POS framework includes the following components:

- Validated statewide tasks lists,

- Aligned technical task lists to the 11th grade Pennsylvania academic standards, which are aligned to the national common core standards,

- Signed statewide and seven out-of-state articulation agreements that lead to 9 or more college credits for secondary technical coursework;

- Aligned secondary technical assessments to the POS performance task lists.

The Pennsylvania Department of Education's, Bureau of Career and Technical Education continued to pursue the development and revision of statewide Program of Study. The program of study effort is aligned with the federal Carl D. Perkins Career and Technical Education Improvement Act of 2006. The Pennsylvania Department of Education's, Bureau of Career and Technical Education has revised Programs of Study, Phase III. The electronic survey results have been returned from instructors in the field, regarding Programs of Study in Phase III. These surveys were used to make changes on task grids for the graduating classes of 2017, 2018, and 2019. A face-to-face meeting was scheduled for instructors of Homeland Security, Law Enforcement, Firefighting, and Related Protective Services, CIP 43.9999 on January 28-29, 2016 at the Holiday Inn in Middletown. Instructors reviewed the current task grid and completed the necessary revisions.

Phase III Programs of Study include:

- 1.biotechnology
- 2.building/property maintenance
- 3.cabinetmaking and millwork
- 4.computer technology/computer systems technology
- 5.construction trades, other
- 6.electromechanical technology/electromechanical engineering technology
- 7.homeland security, law enforcement, firefighting and related protective services, other
- 8.institutional food workers
- 9.logistics materials and supply chain management
- 10.mason/masonry
- 11.medium/heavy vehicle and truck technology/technician
- 12.plumbing technology/plumber
- 13.vehicle maintenance and repair technologies, other

The electronic survey results were tabulated and utilized for the basis of any edits or revisions to the task grids for the respective programs of study. No significant or major revisions were made to the task grids. However, the edited grids were circulated to the instructors in the field, in order to verify accuracy of the revisions.

The revised task grids were circulated to postsecondary institutions for the purpose of revising articulation agreements. The distribution began, during the week of February 22, 2016. Postsecondary institutions reviewed the task grids and validated the accuracy of awarding of credits, as documented in current articulation agreements. As of April 20, 2016, task grids were reviewed by postsecondary institutions, and input has been tabulated by the Bureau of Career and Technical Education.

Final copies of task grids for Programs of Study in Phase III were available on the website in April 2016. As part of the program of study revisions, the Pennsylvania Department of Education's, Bureau of Career and Technical Education also conducts an alignment of the revised technical standards with the applicable technical end-of-program NOCTI assessments.

Program of Study Academic Crosswalks

Academic integration is a requirement of Pa Code 22, Chapter 4 and federal Perkins regulation. The Pennsylvania Department of Education's, Bureau of Career and Technical Education assists secondary schools with the integration of the Pennsylvania Core standards into their career technical education programs. Many schools use crosswalks to demonstrate their alignment to the standards. The Bureau has developed a Program of Study academic crosswalk for each of the Program of Study areas. The Pennsylvania Department of Education's, Bureau of Career and Technical Education has worked with academic and technical instructors to validate the alignment. The technical standards have also been aligned to the National Career Technical Common Core. Academic crosswalks, which demonstrate the alignment of the Pennsylvania Core Standards with the Program of Study task grids, have been posted to the Department's website.

10. During the reporting year, did your state use Perkins funds to provide activities to support entrepreneurship education and training?

No

The state did not use Perkins funds for support entrepreneurship education and training this activity. However, the Pennsylvania State Board of Education has academic standards, preK-12, in the area of career education, which includes Entrepreneurship. Every secondary Perkins recipient must incorporate the academic standards in the approved CTE program of study. Integration is determined locally and the Department ensures the schools are in compliance with state regulation during compliance reviews. The mandated topics within the Entrepreneurship academic standard are: Risks and Rewards, Character Traits and Business Plan.

11. During the reporting year, did your state use Perkins funds to improve the recruitment and retention of career and technical education teachers, faculty, administrators, or career guidance and academic counselors, and the transition to teaching from business and industry, including small business?

Yes

The Department is engaged with three professional development centers to address recruitment. The centers are located at Indiana University of Pennsylvania in the western region, The Pennsylvania State University in the central region, and Temple University in the eastern region. Specifically, each of the centers work with the secondary schools in their regions to provide assistance for prospective teachers to find professional positions, and to assist administrators in locating individuals to fill teaching and other professional vacancies; and, to provide career and technical education personnel with professional development resources for recruiting prospective career and technical education teachers, supervisors and administrators. In addition, the centers assist new career and technical education teachers with the difficult transition from industry to the career and technical education classroom/laboratory. The centers conduct programs in which the participants are involved in learning experiences that have been identified as being essential to the first few weeks of teaching; as well as, professional development activities which are designed to increase and to promote the technical and educational development of the professional educator. In addition, the centers provide personnel who conduct regular and ongoing visits and advising sessions with new teachers, in order to provide real world support and mentoring activities which are designed to produce success in the classroom. These activities are articulated with the ongoing certification program.

12. During the reporting year, did your state use Perkins funds to support occupational and employment information resources?

Yes

The state continues support of the Pennsylvania career standards toolkit and career websites with state funds. The Department also worked with the Career Development Leaders Network to develop career education and work lesson plans associated with the Pennsylvania Career Education and Work standards. The www.pacareerzone.com website identifies the occupations that are classified by Pennsylvania as High Priority Occupations. The website also contains videos of numerous occupations. The videos highlight the skills, experience, wages and projected openings in Pennsylvania. <https://www.pacareerzone.org/videos> .

In addition to the Pa CareerZone website the Bureau supports an online toolkit related to the Pennsylvania academic standards of career education. These standards outline what students should know and do grades K-12 to research a job, find a job, retain a job and entrepreneurship. The website, <http://www.education.pa.gov/k-12/pacareerstandards/Pages/default.aspx#tab-1> , includes numerous links to career resources that include O*NET online, Pennsylvania Workforce Development.

During onsite reviews of Perkins recipients, the Department provides occupation information provided by the Pennsylvania Department of Labor and Industry. This includes providing information on the High Priority Occupations, which are those occupations that lead to family sustaining wages and adequate openings exist. <http://www.workstats.dli.pa.gov/Products/HPOs/Pages/default.aspx> . This also includes information on the Top 50 Employers in each Pennsylvania county. http://www.workstats.dli.pa.gov/Documents/Top%2050/Dauphin_County_Top_50.pdf .