

Consolidated Annual Report, Program Year 2017 - 2018 North Carolina

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

Secondary:

Secondary Development of valid and reliable assessments of technical skills is an ongoing project. During 2017-2018, secure state assessment item banks were developed or adopted/adapted, and field tested in the following 41 courses:

DEVELOPED/UPDATED:

Agriculture:

- AS32 Agricultural Mechanics II
- AN51 Natural Resources I
- AN52 Natural Resources II

Business, Finance, and Information Technology:

- CS11 Project Management I

Family and Consumer Sciences:

- FN41 Food and Nutrition I
- FN42 Food and Nutrition II
- FI51 Interior Design I
- FC11 Principles of Family and Human Services

Marketing and Entrepreneurship:

- MI42 Multichannel Merchandising

ADOPTED/ADAPTED:

Agriculture:

- AS33 Agricultural Mechanics II Small Engines

Business, Finance, and Information Technology:

- BM10 Microsoft Word and Power Point
- BF10 Principles of Business and Finance

Family Consumer Sciences:

- FH71 ProStart I
- FH72 ProStart II

Health Science:

- HB11 Biomedical Technology I
- HH32 Pharmacy Technician
- Trade and Industrial Education:
- IM11 Advanced Manufacturing I
- IM12 Advanced Manufacturing II
- IT11 Automotive Service Fundamentals
- IT16 Automotive Service I
- IT17 Automotive Service II
- IT18 Automotive Service III
- IC61 Drafting I
- IC62 Drafting II- Architectural
- IV22 Drafting II- Engineering
- IC63 Drafting III- Architectural
- IV23 Drafting III- Engineering
- IC41 Electrical Trades I
- IC42 Electrical Trades II
- IC43 Electrical Trades III
- IP22 Emergency Medical Technology II
- IP31 Firefighter Technology I
- IP32 Firefighter Technology II
- IP33 Firefighter Technology III
- IP41 Law & Justice I
- IP42 Law & Justice II
- IM61 Welding Technology I
- IM62 Welding Technology II
- IM63 Welding Technology III
- IM21 Woodworking I
- IM22 Woodworking II

The item banks field tested in 2017-2018 were revised to improve their validity and reliability. Assessments were developed from these banks and from existing banks for courses not currently being developed or revised. Staff worked with third-party vendors to assure their assessments met NC CTE standards. Support was provided to local districts creating valid and reliable assessments for local courses.

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

Secondary:

North Carolina CTE continues to work with North Carolina State University's Center for Urban Affairs and Community Services Technical Outreach for Public Schools (TOPS) to expand the CTE features available in NCTest, the test administration and data collection system that was adopted in 2015. This system can collect data needed to report the 2S1 performance indicator including the collection of third-party proficiency data, results for student end of course assessments, the results for students eligible for alternate assessments, and information on student attainment of business and industry credentials.

Perkins funds were used to develop a North Carolina CTE reporting system that facilitates the integration of data from authoritative sources including student enrollment, student assessment results, student demographics, special programs such as LEP and migrant, Exceptional Children, the Employment Security Commission, and the Department of Community Colleges. The reports show district, school and individual student reports in PowerSchool that provide dynamic outputs from the authentic sources for each performance indicators. The reports also automate a report for Local Education Agencies highlighting students who have met the negotiated criterion to earn articulated credit agreed upon with the North Carolina Community College System.

Postsecondary:

During 2017-2018, postsecondary CTE data was gathered by the Data Analysis team within the Performance Management Section of NCCCS. Extensive analysis and revisions were made to ensure that appropriate and accurate data were available to measure postsecondary CTE performance.

Data results were published in a comprehensive report titled, "North Carolina Community Colleges 2017 Perkins Core Indicators of Performance." The report contained performance indicators for all 58 colleges within the NCCCS. Each performance indicator was presented, along with disaggregated results by age, gender and ethnicity, program area, and career cluster. The report was printed and published electronically to www.ncperkins.org and is available to the public. The data contained in the publication were presented to all 58 colleges and were used throughout the year to assist individual colleges with improving the success of our students.

Consolidated Annual Report, Program Year 2017 - 2018

North Carolina

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?

Secondary:

Secondary CTE provides ongoing assessment that includes analysis of long- and short-range plans from eligible recipients to ensure requirements are addressed, collection and analysis of results of technical assessments including credentials, and monitoring for compliance. Services to special populations students are part of each of these components and receive additional attention through targeted services such as professional development for Special Populations Coordinators and other staff, through Civil Rights Reviews, and through other special activities. Professional development addressing these topics is provided at state and regional workshops and through web-based training. The state identifies "high flyers" that districts in need of improvement can visit.

Local Planning System – Each year districts/Local Education Agencies (LEAs) must submit a plan that analyzes performance of students and programs on all secondary Performance Indicators and other state and local measures and specifies how Perkins funds will be used to address performance deficiencies. LEAs are required to include information about how they will use funds for the following required elements:

- Integrating academics with career and technical education.
- Linking secondary and postsecondary career and technical education programs, including by offering not less than one program of study.
- Providing students with experience in and understanding of all aspects of the industry.
- Developing, improving, or expanding of use of technology.
- Providing professional development for teachers, counselors, and administrators.
- Developing and implementing evaluations of career and technical education programs, including an evaluation of the needs of special populations.
- Initiating, improving, expanding, and modernizing quality career and technical education programs.
- Providing services of sufficient size, scope, and quality.
- Providing activities to prepare special populations for high skill, high wage, or high demand occupations.

Extensive professional development is offered to assist LEA officials in reviewing previous performance, setting improvement goals and developing strategies to meet those goals, and executing those plans. Regional CTE staff work with each LEA to ensure that its plan addresses required components, analyzes previous results, and sets meaningful targets and strategies for improvement.

Technical assessments – NC CTE reports results on Technical Attainment using two types of assessments:

- Statewide post assessments, including secured assessments developed in North Carolina for LEA use and third-party assessments where appropriate.
- Approved Business and Industry credentials aligned to at least 80 percent of the course content. (Results of students on additional credentials that are aligned to a smaller portion of the course are also collected and analyzed.)

During 2017-2018, statewide assessments were administered, and data collected using NCTest, a system managed by NCSU's Center for Urban Affairs and Community Services. CTE assessment development and administration is supported with Perkins funds. Tests contain multiple-choice items and are administered via computer, or, if necessary, using paper and pencil. Beginning in 2013-2014, LEAs are required to count these assessments as 25 percent of the students' final grade. Results are disaggregated in the statewide CTE Local Planning System and used to set improvement goals by teacher, by course, by school, district wide or for the whole state, for all students or for particular target groups including special populations categories and racial/ethnicity and gender classifications. Perkins funds were also used to develop district, school and individual student reports in PowerSchool that showed results on each of the performance indicators. These reports, in addition to serving as a mechanism for data validation, allow users to analyze performance and develop strategies for improvement at a granular level.

Credential information also was collected using NCTest. When possible, the collection of the credential information is imported directly from the credentialing agency as the authentic source. Where this was not possible, teachers documented each student's credential in the NC Test system by uploading credentialing documentation for each student by specific course and credential. Appropriate documentation must be maintained locally and are subject to audit. Results are published annually in the NC CTE Credentialing Data Report.

Results of both technical assessments and achievement of credentials are also used by curriculum developers at the state level to see where changes may be needed in curriculum to better address needs of Business and Industry and to target professional development to demonstrated deficiencies.

Monitoring for Compliance – Since 2013-2014, NC CTE has closely monitored sub-recipient use of funds. LEAs are scheduled for visits on a five-year cycle, with those at greatest risk given highest priority. Risk is determined using a formula that assigns point value to responsibilities of the CTE Administrator, previous results on Performance Indicators, and common compliance criteria. The state is on schedule for at least one visit to each district by 2019. Based on risk determination, some districts receive multiple visits. Teams visit each LEA and report on their findings and recommendations. Regions work together to set benchmarks for performance.

During the reporting year, NC CTE used Perkins funds to develop a CTE Program Evaluation Instrument. This instrument is used as an additional resource to analyze and evaluate CTE performance and effectiveness at the local level. The instrument is not intended to measure all standards of quality, but rather key data that would inform success. The instrument is unique as it can be tailored to fit the needs of the Local Education Agency, as it is intended to guide LEA improvement. The Regional Coordinator works with LEAs to develop a plan to implement needed improvements and provides follow-up assistance as necessary.

In addition, the NC Auditor's statewide Single Audit Report includes an audit of Perkins funds. This statewide report contains a compilation of internal control deficiencies and instances of noncompliance based on NC's statewide financial statement and federal compliance audit procedures.

Additional targeted special populations services – Assessing services provided to special populations students is a focus of state and local CTE efforts. Statewide documents such as the Challenge Handbook have been developed to assist LEAs in determining appropriate services and ensuring services are provided. Improved integration with Exceptional Children's Services makes it easier to track accommodations required and to ensure they are provided.

Data about Special Populations students on technical assessments and credentials is analyzed to provide information about gaps and to assist LEAs and state officials on developing plans to address these gaps. Professional Development is provided statewide and at the regional level to ensure Special Populations Coordinators, Exceptional Children's staff, and others who work with students with special needs in CTE courses have what they need to provide required services. How LEAs meet the needs of Special Populations students is also part of periodic Civil Rights reviews that ensure that all students receive legally required educational services without regard to handicapping condition or other special needs.

Postsecondary:

Individually, colleges assess their own CTE programs on a regular basis as a part of accreditation or as colleges determine the need for such assessment.

Mid-year review sessions were conducted in January to allow colleges to report on their basic grant progress and share concerns.

End-of-year Perkins grant evaluations were conducted with each college or consortium. Each college or consortium submitted a narrative outlining how the college met each of the nine required activities. Colleges were also required to submit a 5-minute best-practice video that demonstrated how Perkins funds increased the academic and technical skills of their students. Following their presentations, a Q & A Session was conducted with state staff.

Monitoring for Compliance – Risk monitoring is conducted annually using a risk matrix that assigns point values using the following categories: performance, new contacts, meeting attendance, timeliness of paperwork, and budget allocation. Once the colleges are ranked, colleges are scheduled for either onsite or desktop monitoring. Colleges were offered Technical Assistance as needed throughout the grant cycle. Two on-site monitoring visits and 11 desk audits were conducted during this grant cycle. Technical assistance was provided on an as-needed basis throughout the year.

Through State Leadership projects, State-led CTE assessments were implemented through 2 leadership projects: Accounting and Finance Alignment Project and the North Carolina Network for Excellence in Teaching (NC-NET).

1. Accounting and Finance Alignment Project – This project was designed to assess and enhance the quality of Accounting and Finance (AFAP) program at each community college. Fifty-two NC community colleges offer accounting and finance programming. The curriculum standards for accounting and finance programs were aligned with industry needs and nationally recognized industry certifications. Program changes included the development of a new Accounting and Finance AAS curriculum standard that was approved by the State Board of Community Colleges and will begin in the fall of 2018.

2. North Carolina Network for Excellence in Teaching (NC-NET)—Provides online access to quality professional development, including resources targeting special populations and non-traditional students, for NCCCS CTE faculty and staff. NC-NET offers online courses and tutorials, planning tools, databases, resource exchange, and a discussion room. Resources are organized into five areas: Teaching and Learning, Discipline-Specific, Career and Personal Development, Technology in the Classroom, and Online Teaching. Six academy courses were supported, and numerous modules were added. In addition, an intensive online practicum on integrated curriculum development was offered. During this course, interdisciplinary teams created classroom-ready projects that integrated career and technical content with academic concepts using real-world scenarios to engage students; fostered critical thinking, collaboration and other skills valued by employers; and encouraged instructors to use active, authentic, assessment techniques.

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

Secondary:

Secondary CTE prepares students for technology they will use in the workplace through professional development on the use of technology for teachers and others, by integrating the use of technology throughout courses and programs, and by other technology efforts within CTE.

Professional Development

Professional development includes both face-to-face and distance learning opportunities such as the following:

About 2,700 CTE teachers and others attended the 2018 CTE Summer Conference. CTE Summer Conference, the state's premier professional development opportunity for CTE, provides hands-on workshops for teachers in the use of technology that is part of their courses. Sessions are scheduled for specific areas in which there is a demonstrated need and are limited to topics where training otherwise might not be accessible. CTE works collaboratively with area high schools and community colleges to give teachers access to state-of-the-art equipment as part of the week-long workshop.

New Teacher Workshops

Other. NC CTE has established Moodle-based Professional Learning Communities for teachers and other educators to share questions, ideas and resources. Curriculum is also distributed electronically via these Moodle PLCs. In addition, free and low-cost services such as Google docs, Dropbox, and Skype are to collaborate with users in the field. As much as possible, meetings and professional development have been moved online via services such as Go to Meeting.

Integrating the use of technology in courses and programs

CTE focuses on including technology in curriculum that aligns with what is used in Business and Industry. Where appropriate, the specific software predominantly available in business is used.

Use of technology in instruction and administration

North Carolina is working continuously to utilize Twenty-First Century technologies in instruction and administration to take advantage of improvements in functionality and operational efficiencies. In 2017-2018, these efforts focused in three areas:

Online student learning. CTE has worked collaboratively with NC Virtual Public School, with local districts, and with third-party vendors to allow CTE courses to be offered online or in a blended format.

Online professional development. NCDPI provides online professional development for teachers and other educators through Home Base. CTE staff funded through Perkins has been instrumental in the development of online workshops. These workshops, available at no cost and which earn continuing education credits, allow teachers to customize activities to their situations to make learning more meaningful.

Data and Reporting. CTE data currently is sent automatically to CEDARS to allow for federal and state reporting. State and regional data are available via spreadsheets provided through a special IT project. District and school data are provided through reports in LEA PowerSchool instances and are in the NC CTE Local Planning System.

Home Base. CTE staff has been involved closely in the design and selection of a learning management system called Canvas. Canvas integrates into the Home Base application. Staff involvement ensures that these new systems will be fully integrated with existing and projected CTE professional development and that needs of CTE students, teachers and administrators will be addressed.

Postsecondary:

As colleges constantly improve the quality of the CTE training and skills learned through career pathways, individual colleges identify emerging technologies and modify instruction to include technology in current use across industry. As colleges determine that changes to technology are relevant to individual CTE programs, those colleges can commit Basic Grant funds to purchase new technology and to train faculty and staff to utilize the technology. State-level approval of these activities is managed through the local Basic Grant application and approval process.

Statewide initiatives include the following:

SkillsUSA— A partnership of students, teachers, and industry working together to ensure that America has a skilled workforce. Participation through SkillsUSA helps institutions improve retention, teach employability skills, leadership skills, offer third-party certifications, and encourage student participation in state and national competition.

NC-NET – Online professional development for faculty that help them infuse employability skills that parallel USDOL foundational skills into their classes. Three professional development academies, “Technology Bootcamp: Incorporating the Latest Tools for Effective Instruction,” “Technology Bootcamp II—More Tools for Reaching Students,” and “Technology Bootcamp III – Reaching Students with Video,” were available to CTE faculty.

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?

Secondary:

Secondary CTE includes pre-service and in-service professional development that is high quality, sustained, and classroom focused.

Pre-service. About 450 teachers participated in a series of workshops that make up an induction program for new teachers and other educators. The workshops can extend up to 40 hours depending on the content area and the responsibilities of the education. The series took place throughout the year and participants learned skills that they took back to their classroom or work environment and use. In subsequent sessions, they built upon previous lessons and their own personal experiences using the skills. The induction program is required for alternatively certified CTE teachers and others moving into new areas of responsibility, and many other new teachers find it beneficial. Originally the workshop involved 40 hours of face-to-face instructions, but updates and revisions allow an increasing percentage to be presented in an online format, making it easier and more cost effective for teachers to participate.

Sessions included topics such as integrating academics and CTE including use of the Common Core Technical Standards, effective teaching skills, working with Career and Technical Student Organizations, and using data to improve instruction.

An online Professional Learning Community (PLC) for new teachers allowed them to share resources and experiences throughout their first years as they develop their teaching skills. Many new teachers reported the online PLC was one of the most valuable resources they have available as it put information they needed at their fingertips and connected them both with experts in the field for assistance as needed and with other new teachers who made up an informal support group.

CTE staff worked closely with teacher certification and licensing areas to ensure that requirements reflected most

Up-to-date content and pedagogical skills. CTE also collaborated closely with Teacher-Education institutions to review licensure requirements and ensure they reflect the current state-of-the-art.

In-service. CTE provided in-service instruction for teachers that allowed them to keep their professional skills current and to improve their students' learning. Professional development activities were offered both as face-to-face workshops and through distance learning to be sure opportunities were available that met teachers' individual needs and addressed their learning styles. Workshops and other training included such topics as the following:

- Project Management Teacher Training
- Training in use of updated curriculum
- NCCER Proctor training
- Specialized training connected to business and industry certifications
- Food Science Teacher Training
- Career Development Facilitator Class
- Working with special populations students
- Test administration processes

Program planning- Implementing a Technical Attainment Improvement Plan o Using Career Clusters and Career Pathways with students

Collaboration within CTE and among other areas

Training on using data from the Local Planning System, PowerSchool, and other authoritative sources to pinpoint areas of weakness and develop improvement strategies was offered to teachers, CTE administrators, and support staff to focus on improving performance on the state's Performance Indicators. Program-specific Professional Development also used performance data to locate problem areas statewide and develop training around those needs.

Postsecondary:

Faculty Pathways to Learning and Success- A professional development initiative designed to provide college instructors information on how high school students learn, managing a multigenerational classroom and maintaining curriculum consistency/integrity. The purpose is to enhance student success in the college experience.

Multiple professional development opportunities were offered throughout 2017-2018 and were recorded for on-demand access through www.ncperkins.org. Topics included:

- Monthly Perkins CTE Update Webinars
- Catalyzing Career & Technical Education through Enhanced Career Pathways
- Work Based Learning: Explore, Experience, and Engage in the Context of Career Pathways
- Career Pathways: Toward Good Jobs and Meaningful Careers
- Engaging Employers in Career Pathways
- Help Youth Discover their Passion and Turn it into a Career Pathway
- Taking Action: Creating the Talent Pipeline of the Future
- Addressing 5P1 and 5P2: Recruiting and Retaining Nontraditional Students
- Working with People who are like Dr. Sheldon Cooper from the TV series "The Big Bang Theory"
- Preparing Young Adults for Careers of the Future

Through a partnership with the Center for Occupational Research and Development, the following professional development opportunities were made available to all NC CTE faculty:

- Incorporating Active Learning Strategies in the College Classroom - Technology Bootcamp I
- Technology Bootcamp II
- Technology Bootcamp III
- Collaborative Curriculum Development for Creating Integrated Instruction - Adjunct Faculty Jumpstart

As part of the Accounting and Finance Alignment project, extensive professional development was provided to all accounting and finance faculty in NC.

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?

Secondary:

CTE continues to focus on use of data to evaluate success in attracting students to nontraditional professions and to pinpoint areas where further attention is needed. Continued efforts include a focus on work-based learning, special projects such as offering camps for nontraditional students, and providing professional development on recruitment of nontraditional students. These efforts resulted in increases in both the number of students enrolled in courses considered nontraditional and the percentage of students enrolled in those courses who were of the nontraditional gender. Continued work is needed in marketing courses to students of the nontraditional gender, developing curriculum to appeal to all students regardless of gender, race and ethnicity, and status as a member of a special populations group, and in training teachers to deal consistently and fairly with all students. NC CTE plays a significant role in these areas, particularly in development of marketing materials and professional development and in equipping LEAs for their efforts.

Postsecondary:

Each of North Carolina's 58 community colleges operates with "open door" policies that ensure that all students with the ability to benefit from participation have the same opportunities to participate in CTE pathways. Regarding non-traditional fields, marketing efforts often include visible examples of students participating in non-traditional fields. Open houses and other events designed to encourage non-traditional participation are regularly implemented by individual colleges, i.e., "Girls Night Out," and Advanced Manufacturing Careers Week, Construction Careers Week activities. Special population students participate in CTE pathways in the same ways that any other students participate. Special population students self-report their information at community colleges, and when a CTE student in need of assistive devices or services is identified, the college may use Perkins funds to provide those devices or services as needed. It is estimated that only a fraction of the students who could qualify for this assistance self-identify and request services. CTE faculty often identify student needs and refer students for appropriate assistance.

Statewide initiatives included the use of the of career development guide titled "North Carolina Career Clusters Guide" that was developed during the 17-18 grant cycle. The guide is a joint endeavor with the NCCCS, the NC DPI and the NC Department of Commerce. Woven throughout the guide is information to expose all students to high-skill, high-wage occupations. The guide uses a four-step process to help students explore careers: 1) Interest Profiler that uses a career assessment, 2) Career Cluster exploration, 3) Explore employment and educational opportunities, and 4) Explore information regarding specific occupations. During this grant cycle, an online version of the guide was developed and can be found online at www.NCcareers.org. Care was taken to ensure a diverse population through the student success stories and accompanying pictures.

We produced a statewide webinar "Addressing 5P1 and 5P2: Recruiting and Retaining Nontraditional Students," which addressed the state-wide and college-level data on non-traditional students. Suggestions were offered to recruit and retain non-traditional students. Colleges had a chance to share their successes.

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?

Secondary:

In compliance with federal law, NC Public Schools administers all state-operated education programs, employment activities and admissions without discrimination because of race, religion, national or ethnic origin, color, age, military service, disability, or gender except where an exemption is appropriate and allowed by law.

LEAs provide support personnel at the school and/or district level to assist members of special populations in being successful in their CTE programs. In some cases, these staff members provide direct instruction to students with special needs, while in others their role is to equip teachers themselves to work directly with the students.

NC CTE uses data extensively to find areas where students with special needs are not being successful and to direct necessary resources to these students. For example, data might indicate that students with disabilities are enrolled in a program at a rate out of proportion to their occurrence in the general student population. This would require review of student records to ensure that students were being placed appropriately rather than just being enrolled in a course without regard to whether it is truly an appropriate placement.

Extensive professional development is provided to teachers across CTE areas on topics such as modifying blueprints for Occupational Course of Study students, working with English Learners and developing adapted activities to meet the needs of special populations students.

Postsecondary:

Each of North Carolina's 58 community colleges operates with "open door" policies that ensure that all students with the ability to benefit from participation have the same opportunities to participate in CTE pathways. Regarding non-traditional fields, marketing efforts often include visible examples of students participating in non-traditional fields. Open houses and other events designed to encourage non-traditional participation are regularly implemented by individual colleges, i.e., "Girls Night Out" and Advanced Manufacturing Careers Week activities. Special population students participate in CTE pathways in the same ways that any other students participate. Special population students self-report their information at community colleges, and when a CTE student in need of assistive devices or services is identified, the college may use Perkins funds to provide those devices or services as needed. It is estimated that only a fraction of the students who could qualify for this assistance self-identify and request services. CTE faculty often identify student needs and refer students for appropriate assistance.

A webinar for all 58 colleges was conducted to focus on supporting students enrolled in non-traditional programs for their genders. During the webinar, colleges shared their best practices for working with non-traditional students.

“Working with People who are like Dr. Sheldon Cooper from the TV series “The Big Bang Theory”” presentations were made at several state conferences to help our college instructors and others deal with students who exhibit some of the idiosyncrasies of Dr. Sheldon Cooper.

“Being a Man in a Woman’s World” presentation at the NCWorks Partnership Conference.

“Access and Accessibility” presentation for the Disability for a Day Conference.

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

Secondary:

NC CTE provides technical assistance to eligible recipients through telephone and email responses to queries; traditional documents and instructions; Frequently Asked Questions and other web-based resources; face-to-face presentations during local, regional, and statewide workshops; online webinars and workshops; and through online PLCs available in all program areas, for teachers by program area and course, for new teachers, for support personnel by specialty, and for CTE administrators.

Postsecondary:

Perkins technical assistance is provided through several mechanisms including informational meetings, webinars, and individual contact. Our NCperkins.org website provides CTE resources on performance data, forms for planning, budgeting, and time-and-effort, state and federal Perkins guidance documents, and other resources including our NC Perkins Handbook as well as all webinars and presentations conducted by the state staff.

A statewide planning meeting was conducted to help local contacts with the application process. This meeting provided the framework through which NCCCS guided the colleges in their Perkins-supported CTE activities. New local college contacts were required to attend a webinar series titled “Perkins 101” that introduced the participants to the Carl D. Perkins Act and the nine required activities. A webinar was held at the beginning of the spring semester to provide updates and guidance on upcoming activity.

Two Program Coordinators are each assigned 29 colleges and provide technical assistance daily on an as-needed basis. The Program Coordinators aid local college Perkins staff in implementing their local grant. Technical Assistance is conducted face-to-face or in online format. Colleges have a direct line of communication with their Program Coordinators for help with any day-to-day Perkins-related questions.

7. Serving individuals in state institutions

Part I: State Correctional Institutions

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

110000

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

57

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

Secondary:

Four schools are operated by the Department of Juvenile Justice (DJJ). They offer CTE course content to youth who are incarcerated for more than six months. Courses offered include Horticulture I, Business Management, Personal Finance, Principles of Business and Finance, Microsoft Word and PowerPoint, Career Management, Teen Living, Principles of Health and Human Services, Parenting and Child Development, Culinary Arts and hospitality, and Introduction to Automotive Service. The NCDPI provides curriculum resources and support for these schools.

Students in programs at state correctional institutions are included in North Carolina's performance measures where appropriate.

Postsecondary:

Limited courses and services are provided to incarcerated adults in the North Carolina Prison System. These programs receive no direct Perkins funding but benefit from curriculum resources and professional development services provided system-wide. Students in programs at state correctional institutions are included in North Carolina's performance measures where appropriate. Our NC Career Cluster Guide was distributed to the correctional institutions.

Part II: State Institutions Serving Individuals with Disabilities

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

15000

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

253

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

Secondary:

Institutions serving students with disabilities receive direct Perkins funds. In addition, the NCDPI provides curriculum resources and support for these schools.

Postsecondary:

none

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

Yes

Secondary

During 2017-2018, 1,378 students (unduplicated) were enrolled in CTE courses in North Carolina Charter Schools. Charter schools offering Career and Technical Education participate in the annual CTE testing program. Charter school students are included in performance indicator data. Staff have access to the same curriculum and professional development that is made available to all teachers statewide. Regional staff provide additional support to charters. Charters can apply for additional Perkins funds, but none has yet opted to do so.

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

Yes

Secondary:

NC CTE supported curriculum projects, personnel and professional development in Family and Consumer Sciences during 2017-2018. Projects carried out included the following:

- Assessment item development for the Food and Nutrition I, Food and Nutrition II, and Interior Design courses
- Development of Teaching as a Profession I curriculum
- Development of Teaching as a Profession II curriculum

Postsecondary:

Many colleges chose to use their basic grant funds to update equipment, faculty professional development, and other activities to enhance culinary, early childhood education, and interior design programs.

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?

Yes

Secondary:

The Catalyzing Career and Technical Education Through Enhanced Career Pathways Incentive Funding Grant was released in April 2017. The purpose of the grant funding was to increase positive outcomes for individuals and employers through investment in and enhancement of promising pathway implementation practices. Primary goals include:

- Advance the work of existing Career Pathways
- Reward consortia that are implementing pathways with fidelity
- Focus attention on the outcomes of the pathway work to date
- Reinvest funds into new or improved strategies that will further pathway reach and outcomes

Postsecondary:

Thirty-five regional pathways have been certified by the NC Works Commission, community colleges have submitted frameworks for over 170 grades 9-14 CTE Programs of Study, and school systems have reported over 330 grades 9-14 pathways in a variety of program area and disciplines.

Grants were given to colleges to enhance current CTE Pathways or CTE 9-14 Pathway Frameworks. Building on the eight approved elements: demand-driven and data-informed paths, employer engagement, collaboration, articulation and coordination, work-based learning, multiple entry and exit points including industry-recognized credentials, career awareness and comprehensive career advising and support services, and methods of evaluating pathway success.

While each local partnership is expected to express the metrics they will use to monitor the success of the pathway, little effort has focused on the pathway outcomes to date. Given the number of years into the process and the efforts to assist in the development of the pathways, the workforce partners sponsoring this grant believe it is appropriate to begin to show positive outcomes from the pathway implementation. High school and community college partnerships are stressed throughout the Perkins Act. There are many strong examples of 9-14 pathway frameworks in place. The purpose of the competitive program is to reward those local partnerships, that through successful implementation of their pathways, have experienced positive outcomes for their region and to begin to hold up viable examples of measurement for statewide replication.

The goal of the grant planned in 2016-17, and implemented in 2017-18, is to catalyze CTE through enhanced career pathway implementation and increase positive outcomes for individuals and employers through increased investment in promising pathway implementation practices. Funds awarded through the process will be reinvested and leveraged with existing resources to enhance current systems. Funds should be targeted at activities directly aligned to pathway outcomes; not to the process of developing the pathway.

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?

Yes

Postsecondary:

Local colleges utilize Basic Grant funds to support career counselors who assist CTE students in career planning and job placement. These services are available to all CTE students and graduates.

Consolidated Annual Report, Program Year 2017 - 2018

North Carolina

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?

Secondary:

North Carolina continues to focus on Integrating academic and CTE skills. The success of these efforts is illustrated by the continuing high level of performance in the number and percent of CTE concentrators earning a silver or higher Career Readiness Certificate on the WorkKeys assessment, which is reported in the state's accountability process as one measure of school and LEA accountability. In 2017-2018, 31,726 students earned silver or higher Career Readiness Certificates, up from 21,403 in 2011-2012, the first year detailed statewide WorkKeys data were collected. In all, nearly 42,779 students earned Career Readiness Certificates in 2017-2018, and 4,946 of those were platinum, the very highest level available.

Many of these concentrators graduate from high school with one or more CTE community college credits, due to support of the Career and College Promise (CCP) program by the state legislature. CCP allows students to take a focused course of study that includes both traditional secondary and postsecondary courses and to count both toward graduation. In the CTE pathway, students can earn multiple CTE postsecondary credits while they are still in high school. The College Transfer pathway requires students to take a specific CTE course in computers and to transfer those credits to a non-technical program.

In addition, the NCDPI is continuing a project with the NC Community College System and the NC Department of Commerce to expand the use of Career Pathways to all regions of the state. In 2012-13, two regions were involved in asset mapping and constructing career pathways in particular industry sectors. Counties were selected in the northeast with a health sector focus and counties in the southwest with a focus on transportation, distribution and logistics. The project brings together industry partners as part of a statewide leadership team and brings many partners to help create the pathways in the regions. Partners include postsecondary institutions, workforce development and economic development boards and business/industry leaders. This pilot work served as the foundation for a larger statewide effort that expanded traditional programs of study. The NC Works Commission have criteria for NC Works Certified Career Pathways which recognizes pathways that meet the State's rigorous requirements. Certified Career Pathways are integrated, seamless systems of education and workforce development programs developed by engaged employers, workforce development boards, high schools and colleges. In 2017-2018, all LEAs submitted a minimum of three updated pathways in at least one or more industry sectors.

Other efforts made in 2017-2018 to increase the integration of academic skills with CTE included the following:

- Incorporation of communication, mathematics and other related content into newly developed CTE courses.
- Ongoing professional development.

Implementation of honors credit for high-level Career and College Promise (Community College) courses and strengthening use of existing CTE honors courses.

Postsecondary:

Each college receiving Basic Grant funds assures that they will provide support to CTE programs and that efforts are consistently made to improve the academic and technical skills of students through the integration of academics with CTE. Minimally, each college requires both academic and CTE courses to complete any CTE pathway; however, many colleges also update and revise CTE pathways to better integrate academic and CTE skills through "contextualized" academic courses and academic course sections that only enroll CTE students.

Accounting and Finance Alignment Project – This state-wide project was designed to assess and enhance the quality of Accounting and Finance (AFAP) program at each community colleges. Fifty-two NC community colleges offer AFAP programming. The curriculum standards for accounting and finance programs were aligned with industry needs and nationally recognized industry certifications. Program changes included the development of a new Accounting and Finance AAS curriculum standard that was approved by the State Board of Community Colleges and will begin in the fall of 2018.

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.

Secondary:

CTE efforts in NC are undergirded by the strong partnership between the state education agency (NCDPI) and the NC Community College System (NCCCS). In addition, CTE works with other divisions and staff within NCDPI to align curriculum and standards, utilize technology effectively, and provide comprehensive, research-based professional development. Other state agencies such as the NC Department of Commerce and the NC Department of Health and Human Services work closely with CTE.

CTE Pathway Development Grants (formally known as NCWorks Pathways) – During this grant cycle, the 20 colleges that were awarded the CTE Pathway Development Grants wrapped up their two-year grant. During the two years the 20 colleges developed career pathways that incorporated nationally identified key elements and characteristics into best practices that could be modeled throughout North Carolina. Pathways included a demonstrated local industry need and partner collaboration and provided a well-defined sequence of courses for grades 9-14. In the spring, all 20 colleges presented the work completed on their campus. A final report titled, “Taking Action: Creating the Talent Pipeline of the Future” was released to all 58 colleges in NC and was made available to the public online at http://www.ncperkins.org/pluginfile.php/1578/mod_resource/content/1/CreatingCareerPathways_Final_11%20%2017.pdf

CTE partnerships with business and industry provide students with resources to more closely align CTE courses and programs with business and industry needs. Partners assist in the development and validation of curriculum and assessment materials, facilitate opportunities for work-based learning, provide classroom resources, and provide opportunities for student and instructor credentialing.

Current CTE partners include (but are not limited to) Microsoft Corporation, Electude, CISCO, the Office of the State Fire Marshall, the NC Automobile Dealers Association, the Printing Industry of the Carolinas, the Homebuilders Association, the National Restaurant Association, the National Center for Construction Education and Research, the Project Management Institute Educational Foundation, MBA Research, and the University of North Carolina General Administration and the Center for Educator Recruitment, Retention, and Advancement.

The Governor's Chief Policy Advisor on Education serves as an advisor to the NC State Board of Education (also the CTE Board). This participation ensures that the Governor's office is aware of CTE initiatives and performance. The State Superintendent of Public Schools and the President of the Community College system sit on the Governor's Education Cabinet along with other key leaders in the administration. This connection ensures that all parties are aware of activities.

This year the Education Cabinet had worked in several subcommittees on specific areas of interest to the Governor. The CTE Assistant Director served on the Talent and Pipeline Development subcommittee with community college, university, and business/industry leaders.

Another key connection is the NC Works Commission. This Commission is established in statute and prescribes seats to community college leadership, the Department of Public Instruction, the Department of Commerce, and business leaders. The chair of the commission is appointed by the Governor and serves as an additional liaison. The Commission has also been working in smaller subcommittees this year to respond to legislative changes. The NCCCS and NCDPI have participated heavily in the development of the Commission's Strategic Plan, performance and evaluation measures and the development of Memorandum of Understandings related to One-Stop centers.

North Carolina also has a Business Committee on Education with an executive director appointed by the Governor. NCBCE is a key partner of the NCDPI and the NCCCS. We partner in work-based learning activities such as Students@Work and with other key initiatives that are a focus of business. In recent months, the group has participated in the Pathways to Prosperity efforts and is currently developing processes to engage members in teacher externships.

Both the NCCCS and NCDPI maintain seats on the NC Apprenticeship Council through the Community College System. This group works closely to promote and support apprenticeship and other work-based learning models. The NCDPI and NCCCS have seats on the NC Works Commission. The NCDPI and NCCCS have seats on the North Carolina Employment and Training Association professional development group of front-line workforce service providers, educators, trainer, and state agencies involved in workforce development issues.

All CTE efforts in North Carolina stem from the partnership between NCDPI and NCCCS. Additionally, NCCCS works with the University of North Carolina (UNC) System to assist students who choose a state university for the next phase of their CTE pathway. Efforts to update the North Carolina Comprehensive Articulation Agreement between NCCCS, UNC, and private institutions of higher education were completed this year. NCCCS also maintains active partnerships with the NC Department of Commerce.

Local colleges are implementing activities designed to develop career pathways. Individually, these efforts are resulting in partnership efforts that incorporate high schools in the service area, industry, intermediaries, and other relevant parties.

State-wide, the NCCCS and NCDPI are collaborating with the Chief State School Officers and Advance CTE to improve the number of students who complete CTE pathways through the implementation of Next Gen Sector Partnerships and certifying high quality CTE pathways through the NC Work Commission utilizing WIOA supports.

Postsecondary:

CTE efforts in NC are undergirded by the strong partnership between the state education agency (NCDPI) and the NC Community College System (NCCCS). In addition, CTE works with other divisions and staff within NCDPI to align curriculum and standards, utilize technology effectively, and provide comprehensive, research-based professional development. Other state agencies such as the NC Department of Commerce and the NC Department of Health and Human Services work closely with CTE.

Military Credit for Prior Learning - A partnership between the North Carolina Community College System, UNC, and all branches of the military for the uniform granting and transferring of course credits for military training and occupational experience to veteran students enrolling in NC colleges and universities. A crosswalk of military occupations and courses to courses within higher educational institutions is being created.

Competence Based Education (CBE) - This project allowed lead colleges to develop a strategic plan, policy framework and model CBE pathway for North Carolina to provide competency-based education in the state.

CTE partnerships with business and industry provide students with resources to more closely align CTE courses and programs with business and industry needs. Partners assist in the development and validation of curriculum and assessment materials, facilitate opportunities for work-based learning, provide classroom resources, and provide opportunities for student and instructor credentialing.

The Governor's Chief Policy Advisor on Education serves as an advisor to the NC State Board of Education (also the CTE Board). This participation ensures that the Governor's office is aware of CTE initiatives and performance. The State Superintendent of Public Schools and the President of the Community College system sit on the Governor's Education Cabinet along with other key leaders in the administration. This connection ensures that all parties are aware of activities.

Another key connection is the Commission on Workforce Development. This Commission is established in statute and prescribes seats to community college leadership, the Department of Public Instruction, the Department of Commerce, and business leaders. The chair of the commission is appointed by the Governor and serves as an additional liaison. The Commission has also been working in smaller subcommittees this year to respond to legislative changes. The NCCCS and NCDPI participated in the development of the Commission's Strategic Plan, performance and evaluation measures and the development of Memorandum of Understandings related to One-Stop centers.

North Carolina also has a Business Committee on Education with an executive director appointed by the Governor. NCBCE is a key partner of the NCDPI and the NCCCS. We partner in work-based learning activities such as Students@Work and with other key initiatives that are a focus of business.

The NC office of Apprenticeships moved from the state Department of Commerce to the NC Community College System. Both the NCCCS and NCDPI maintain seats on the NC Apprenticeship Council. This group works closely to promote and support apprenticeship and other work-based learning models.

The NCDPI and NCCCS have seats on the NC Workforce Commission.

The NCDPI and NCCCS have seats on the North Carolina Employment and Training Association (NCETA) Board of Directors. NCETA is a professional development group of front-line workforce service providers, educators, trainers, and state agencies involved in workforce development issues.

All CTE efforts in North Carolina stem from the partnership between NCDPI and NCCCS. Additionally, NCCCS works with the University of North Carolina (UNC) System to assist students who choose a state university for the next phase of their CTE pathway. Efforts to update the North Carolina Comprehensive Articulation Agreement between NCCCS, UNC, and private institutions of higher education were completed this year.

NCDPI and NCCCS work together each year to maintain and update the High School to Community College Articulation Agreement, which allows high school students to earn college credit after successful completion of selected high school courses.

Local colleges are implementing activities designed to develop career pathways. Individually, these efforts are resulting in partnership efforts that incorporate high schools in the service area, industry, intermediaries, and other relevant parties. State-wide, the NCCCS and NCDPI are collaborating with the Chief State School Officers and Advance CTE to improve the number of students who complete CTE pathways through the implementation of key industry networks and certifying high quality CTE pathways.

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

Yes

Secondary:

NC CTE collaborated with other divisions within the state education agency and other agencies including NCCCS to strengthen counselors' knowledge of CTE offerings, to provide support materials for students and parents, to focus additional attention on Career Clusters and courses of study, and to further develop the state's Career and College Promise program, which allows students to take postsecondary courses while they are still in high school. The Career Pathways efforts requires LEAs to describe guidance efforts in the pathway areas of focus beginning in grade 8.

Continued career pathway efforts and development serve to improve guidance and counseling programs as does the professional development delivered by NC DPI and NCCCS.

Postsecondary:

Local colleges utilize Basic Grant funds for guidance and counseling programs for CTE students. Statewide, guidance and counseling are supported through modules on NC-NET, as well as webinars on a variety of career-development topics.

The following statewide leadership projects were implemented to improve the level of counselor training regarding occupational and employment information resources.

Employability Skills Toolkit - An online training resource with self-paced modules and classroom resources designed to assist CTE faculty as they update courses to prepare CTE students with the "soft skills" needed to gain employment, keep employment, and advance in careers. Professional development workshops/trainings were held statewide, as requested by colleges.

Work Based Learning - A grant will be administered collaboratively by the following sections of the North Carolina Community College Programs and Student Services Division: Academic Programs, Career and Technical Education, College and Career Readiness, and Workforce Continuing Education. The purpose is to develop of new employability skills training materials such as courses and modules to reflect the needs of North Carolina employers and workforce to be implemented in all disciplines in the NCCCS.

The "North Carolina Career Clusters Guide" was developed during the 2017-18 grant cycle. The guide is a joint endeavor with the NCCCS, the NC DPI and the NC Department of Commerce. Woven throughout the guide is information to expose all students to high-skill, high-wage occupations. The guide uses a four-step cycle to help students explore careers: 1) Interest Profiler that uses a career assessment, 2) Career Cluster exploration, 3) Explore employment and educational opportunities, and 4) Explore information regarding specific occupations. 25,000 copies were printed and distributed to the colleges as well as high schools and one-stop centers. Copies are handed out at workshops. An online version of the guide can be found online at www.NCcareers.org.

A presentation on careers of the future was presented at the state meeting of the Career Coaches.

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

Secondary:

Local colleges utilize Basic Grant funds to develop and implement local articulation agreements with LEAs and universities for specific CTE programs. Statewide articulation agreements -- high school to community college articulation agreement for CTE programs, a community college to university articulation agreement for curriculum program students, and the RN-BSN Uniform Articulation Agreement -- are operational and are regularly reviewed and updated by stakeholders.

During this grant cycle, the Independent Comprehensive Articulation Agreement continues to support the agreement between the North Carolina Community College System and the Signatory Institutions of North Carolina Independent Colleges and University that will provide a smooth transfer for community college students who wish to continue their education at an independent college or university in North Carolina with minimal loss of credit or repetition of work. To date, 24 independent colleges and universities have signed this agreement.

Additionally, during this grant cycle a Uniform Articulation Agreement between the UNC Baccalaureate Engineering Programs and the NC Community College System was developed and approved. The Uniform Articulation Agreement promotes educational advancement opportunities for Associate in Engineering completers and the constituent institutions of The University of North Carolina to complete Bachelor of Science in Engineering degrees. This Associate in Engineering to Bachelor of Science in Engineering Articulation Agreement (AE to BSE AA) is between the State Board of North Carolina Community Colleges and The University of North Carolina Board of Governors. It applies to all NC community colleges that operate the AE program and to UNC constituent institutions (ECU, NC A&T, NCSU, UNC-Charlotte, and Western Carolina).

Postsecondary:

Local colleges utilize Basic Grant funds to develop and implement local articulation agreements with LEAs and colleges for specific CTE programs. This is in addition to the state High School to Community College Articulation Agreement, which was last updated in 2016-2017.

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

Postsecondary:

Local colleges utilize Basic Grant funds to develop career pathways that include opportunities for CTE students to continue their career pathway at universities through articulation agreements and by consistently updating CTE programs to ensure that students who complete community college CTE programs possess the skills needed to enter and successfully complete baccalaureate programs.

Statewide, individual projects were implemented to encourage specific CTE programs to meet the standards of accrediting bodies. A benefit of the accreditation is that students matriculating from accredited programs to university programs were educated through a program that meets the intensive standards of the accrediting body. North Carolina currently has four articulation agreements for transfer to a baccalaureate institution: The Comprehensive Articulation Agreement, the Uniform Articulation Agreement in Engineering, the Uniform Articulation Agreement in Nursing, and the Independent Comprehensive Articulation Agreement. Individual colleges also have various local bi-lateral agreements with many baccalaureate institutions.

Nursing videos depicting and promoting training in eastern and western NC, the Raleigh region, and at WSSU were developed to emphasize the following initiatives RN to BSN; Regionally Increasing Baccalaureate Nurses (RIBN) program, and RN to BSN Competency- Based Education (CBE) program.

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

Yes

Secondary:

Secondary student membership in CTSOs increased by 1,125 student members during the 2017-18 academic year. Below is the state level of student membership by CTSO for the 2017-18 school year:

- DECA: 7,696
- FBLA: 6,384
- FCCLA: 3,493
- HOSA: 10,059
- SkillsUSA: 5,312
- TSA: 6,277

Postsecondary:

Local colleges may utilize Basic Grant funds to support CTSOs. A member of the state CTE staff is a North Carolina SkillsUSA Board Member and is working to increase postsecondary participation in CTE student organizations at local colleges. Since NCCCS began permitting the use of Perkins funds to support CTSOs, many colleges are now participating in CTSO activities. Postsecondary participation at the North Carolina SkillsUSA State Competition increases every year. To raise awareness of the benefits of CTSOs, a state-wide planning meeting was held onsite at the SkillsUSA State Competition to allow college representatives to learn more about SkillsUSA.

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

Secondary:

Courses within the Career Clusters allow students to experience “all aspects of an industry” as they build a coherent sequence of courses in a program of study that prepares them for the specific careers in which they are interested. Work-based learning opportunities available in all CTE courses also help students understand all aspects of an industry.

Postsecondary:

Advanced Manufacturing Careers Awareness Week served as a coordinated effort between NCDPI, local school districts, NCCCS, individual community colleges, and industry to promote and encourage enrollment in Career Clusters that include Advanced Manufacturing. This activity brought together colleges, industry representatives, students and potential students, and parents to better understand the “modern” manufacturing industry. There were 79 open houses or other events at colleges and businesses across the state during the first week of October 2017.

Construction Careers Awareness Week was created to raise the awareness of construction occupations, especially for students who are in the process of choosing their future career. A group of concerned educators, construction companies, and community leaders are working together to ensure a future pipeline of workers for the construction industry. Construction Careers Awareness Week is designed to inform students, potential students, and parents to better understand the construction trades through open houses and other informational events. For the first year of this annual event, there were 13 open houses or other events across North Carolina during the second week of April 2018.

Local colleges utilize Basic Grant funds to provide faculty with opportunities to “return to industry” to improve CTE programs by integrating industry experience into course work. Professional Development activities supported by State Leadership funds provide opportunities for CTE faculty and staff to identify specific professional development needs, including various aspects of industry that may not be part of the curriculum.

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?

Yes

Secondary:

Development of partnerships between education and specific business or industry groups continues to be a focus in both secondary and postsecondary CTE. CTE solicits support of business representatives who can be called on when needed for various activities. One significant component of these efforts is NC Works Career Pathways. This project is a combined effort of the NCDPI, NCCCS, Department of Commerce, Governor's Office, and is a follow-up from the Pathways to Prosperity report released in 2011. Efforts are underway to expand career pathways to all LEAs and regions of the state. The State has developed processes and support for creating pathways to meet economic needs for regions in the state. The State has supported the efforts through professional development, documents, and guides that give framework for how the engagement can be meaningful and drive pathway discussions including curriculum development and work-based learning expectations.

In addition to traditional work-based learning initiatives such as cooperative education that require business support, Students@Work continues. Students@Work is an innovative project that provides job shadowing opportunities for middle grades students and is a collaborative program between NCDPI CTE and the North Carolina Business Committee for Education.

State Board of Education Policy was updated to allow hiring of adjunct faculty for CTE programs where they are difficult to staff. Very specific guidelines drive this policy ensuring high quality teaching in the skilled area.

Postsecondary:

Individually, colleges statewide use Perkins funds to work with industry. For all CTE programs, advisory committees that include industry representatives are convened regularly to ensure that CTE programs are meeting the needs of industry. Several colleges have employed business intermediaries to facilitate these conversations and to be the staff primarily responsible for facilitating transition from student to employee. Some of the business intermediaries are also serving as the catalyst for work-based learning/cooperative education, by identifying industries/employers needs and placing students in cooperative opportunities.

Some local colleges hire a work-based learning coordinator with Perkins funds to facilitate student internships, apprenticeships, and other learning that takes place at work sites.

Although no formal statewide agreements regarding adjunct faculty exist with individual businesses, local colleges work closely with industry to utilize qualified industry employees as adjunct faculty or at least as guest speakers in the classroom. This utilization of adjunct faculty and their input regarding programing decisions is critical to ensuring that CTE programs are appropriate to the needs of industry.

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

Secondary:

In 2017-2018, curriculum materials for 15 courses were revised or developed/adopted. In addition, opportunities were explored for new courses to address growing employment needs and several courses were updated to more closely align skills required with business and industry needs.

NCDPI staff collaborated with NC Virtual Public School and local school districts to develop online curriculum.

Postsecondary:

Local colleges utilize Basic Grant funds to modernize and expand CTE programs through the development of new CTE courses and programs and to increase the number of course sections available for high-demand CTE courses. Faculty supported through these efforts may use Perkins funds for up to three years. After three years, it is expected that colleges will absorb these costs. Many local colleges utilized Basic Grant funds to provide funding for faculty to earn industry-recognized credentials or advanced degrees in their field.

Statewide, an Advanced Manufacturing Careers Awareness Week served as a coordinated effort between NCDPI, NCCCS, colleges, and industry to promote and encourage enrollment in Advanced Manufacturing programs.

Construction Careers Awareness Week raises the awareness of construction occupations especially for students who are in the process of choosing their future career.

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

Yes

Secondary:

Ongoing review of existing courses ensures that entrepreneurship ideas and concepts are reinforced wherever appropriate throughout the curriculum. Students who wish to focus on entrepreneurship within specific content can study entrepreneurship and virtual enterprise. Professional development aligned to existing courses helps teachers continue to improve their knowledge and skills related to entrepreneurship and how it applies to their specific content areas.

Postsecondary:

Colleges within the NCCCS have Small Business Centers (SBC) that promote entrepreneurship education and training. Resources provided by the SBC is used by many colleges to enhance CTE programs.

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

Secondary:

The induction program for new CTE teachers continues to be a major retention tool. This program was offered in a blended format to 300 teachers in 2017-2018. Although originally conceived as a service for teachers who are alternatively certified, the program now includes several participants from traditional teacher-education institutions.

Other efforts that took place in 2017-2018 included continuing an Administrative Internship for prospective CTE Administrators or those in their early years in administrative positions and providing support for low-enrollment CTE Teacher Education programs in danger of being discontinued by the University of North Carolina System.

Postsecondary:

Local colleges utilize Basic Grant funds to provide professional development opportunities to better prepare CTE faculty and staff. Often these opportunities assist with the transition from industry to CTE. Statewide, through NC-NET, we have developed a CTE Adjunct Faculty Toolkit designed to assist practitioners with the learning and implementation of the elements of an effective instructor. The NC-NET Academy courses provide faculty with pedagogical training for the community college classroom. An Adjunct Faculty Jumpstart course through NC-NET provides on-demand professional development for new adjunct faculty in NC.

A CTE Faculty Leadership project brought CTE faculty together to learn a broader array of teaching skills. This gives them better confidence in their teaching and helps them to truly embrace a career in teaching.

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

Yes

Secondary:

CTE Pathway Development Grants (formally known as NCWorks Pathways) – During this grant cycle, the 20 colleges that were awarded the CTE Pathway Development Grants wrapped up their two-year grant. During the two years, the 20 colleges developed career pathways that incorporated nationally identified key elements and characteristics into best practices that could be modeled throughout North Carolina. Pathways included a demonstrated local industry need and partner collaboration and provided a well-defined sequence of courses for grades 9-14. In the spring, all 20 colleges presented the work completed on their campus. A final report titled, “Taking Action: Creating the Talent Pipeline of the Future” was released to all 58 colleges in NC and was made available to the public online at http://www.ncperkins.org/pluginfile.php/1578/mod_resource/content/1/CreatingCareerPathways_Final_11%20%2017.pdf

Postsecondary:

Local colleges utilize Basic Grant funds to provide CTE students with occupational and employment resources in the form of career counselors and career development resources. In addition, colleges receiving NCWorks Leadership Grants developed common frameworks in multiple CTE program areas that infused career development, work-based learning, and stackable industry-recognized credentials. Each of the frameworks developed were shared with all community colleges within the NCCCS.

We created and distributed an updated version of the NC Career Clusters Guide during the 2017-18 grant cycle. The guide is a joint endeavor with the NCCCS, the NC DPI and the NC Department of Commerce. Woven throughout the guide is information to expose all students to high-skill, high-wage occupations. The guide uses a four-step process to help students explore careers: 1) Interest Profiler that uses a career assessment, 2) Career Cluster exploration, 3) Explore employment and educational opportunities, and 4) Explore information regarding specific occupations. 25,000 copies of this guide were published and distributed to the colleges as well as to high schools and the one-stop centers. An online version of the guide was developed and can be found online at www.NCcareers.org.