

Consolidated Annual Report, Program Year 2015 - 2016

Virginia

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

Implementing competency-based curriculum – Virginia's Educational Resource System Online (VERSO), is the state's Web-based curriculum management system, which accommodates CTE task lists, student competency records, and instructional frameworks. Each June, the CTE Resource Center posts the curriculum task lists and student competency records for the next school year and notifies educators of this new information through email distribution. Additional email messages go out from the Center periodically throughout the year to inform registered users of new resources. The student competency records are a critical component of the “valid and reliable” assessment for Virginia's CTE courses/programs. VERSO also identifies third-party state licenses, occupational competency tests, and industry-recognized certifications that are associated with each CTE courses and that contribute to the assessment component of technical skills attainment.

CanDo – This Web-based data system that tracks student performance of CTE competencies was developed by Arlington County Schools—in association with SchoolTool—and was built on open-source software. The CanDo system pilot project began in the second semester of the 2008-2009 school year with eight school divisions participating. The VDOE offered the second phase of the pilot in 2009-2010. Five school divisions participated in this phase of the pilot, which required school divisions to configure and house the data locally. Additionally, because there were no restrictions on the use of CanDo, several school divisions independently and voluntarily implemented the system outside of the pilot. All participating school divisions had access to training and technical support by the CTE Resource Center. In the summer of 2012, major enhancements were programmed for CanDo, which would allow for multiple-year tracking of competency attainment. By June 30, 2016, 42 school divisions were using the system.

Career and Technical Education (CTE) actively partners with business and industry to design and provide high quality, dynamic programs to meet current, emerging and projected labor market needs. Virginia's 16 career clusters help students investigate careers and design a rigorous and relevant plan of study to advance their career goals. Each career cluster contains multiple pathways that represent a common set of academic, technical and employability skills. Career pathways lead to credentials that qualify students for a range of career opportunities from entry level to professional level.

The “Virginia's Credentialing Initiative” brochure provides a snapshot of the number of industry credentials earned by students in career and technical education over the past several years. “Virginia's Credentialing Performance Trends” brochure connects the value of earning industry credentials and postsecondary degrees with fulfilling workplace needs in high-wage high-skill, and high-demand jobs/careers. “Virginia Career and Technical Education Program Highlights 2014-15” brochure summarizes statewide demographics and student performance. These brochures are posted on the Virginia Department of Education CTE Web page and disseminated widely to stakeholders throughout the year.

Developing valid and reliable assessments for technical skills – Industry Certification for teachers – As part of the “valid and reliable” assessment for technical skills, Virginia utilizes industry credentials and occupational competency assessments as part of the graduation requirement. In order for the students to qualify for a verified credit through industry credentials, the teachers must also have earned the appropriate industry credential (e.g., CISCO Certified Network Associate Examinations, A+ Certification Examinations, Automotive Service Excellence Exams). The state has provided both online training that is available 24/7 and also workshops that provide both training and testing for the teachers. The performance requirement for school divisions has been in effect since the 2008-2009 school year, and it has required additional continuous training, ongoing technical assistance, and reporting efforts.

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

Enhancing Data Systems – For certain research projects, the VDOE uses the National Student Clearing House to secure follow-up information beyond the one year required of CTE completers.

Consolidated Annual Report, Program Year 2015 - 2016

Virginia

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

Each LEA participates in an annual assessment of its local programs based on program improvement standards composed of two elements: performance standards and CTE follow-up survey of program completers. Data are provided to each school division based on programmatic results so that school divisions can identify areas of improvement in specific programs. In conjunction with the program improvement component, a monitoring system is in place to assess compliance with federal and state regulations, and is designed to focus on continuous program improvement and student achievement. The school divisions' CTE programs are reviewed on a six-year cyclical schedule over a two- to three-year period with follow-up as needed. Ongoing technical assistance during the process is provided to school divisions by webinars and individual teleconferences. The monitoring system consists of three phases: Phase I – requires the school division to conduct a comprehensive CTE self-assessment on a six-year cyclical schedule and develop a program improvement plan, as needed, to address identified deficiencies and concerns. During 2015-2016, twenty-two (22) school divisions participated in this compliance assessment of their CTE programs. Phase II – requires the VDOE to conduct an analysis of the self-assessment report and other relevant data that may include an onsite visitation to review specific CTE programs. Pursuant to the six-year cyclical schedule, school divisions that are identified to complete a self-assessment in the current school year are in the targeting pool for an onsite review the following year. Using the targeting criteria approved by the U.S. Department of Education, the seven highest ranking school divisions are identified for an onsite review. During 2015-2016, seven school divisions identified from the 2014-2015 assessments received onsite monitoring reviews. Phase III – requires the school division to follow-up on the identified deficiencies and concerns.

The Local CTE Plan also requires the school division to correlate their achievement on performance standards to the use of Perkins funds. For the Technical Skills Performance Standard (2S1), the VDOE measures the standard by the number of industry credentials earned by CTE program completers.

Postsecondary

The Virginia Community College System (VCCS) has embarked on a six year strategic plan, Complete 2021. Concisely stated, Complete 2021's primary goal is to triple the number of credentials in career and technical occupational fields awarded for the Commonwealth's economic vitality and individual prosperity. These credentials include industry certifications, licenses, and registered apprenticeships. Industry certifications must be industry-recognized, portable, competency-based, third party validated, and, where possible, stackable as part of a career pathway framework. The local colleges are required to submit annual plans to improve upon goals and college presidents are evaluated on progress towards meeting those goals.

Wage and earnings outcomes for completers for all VCCS programs including career and technical education programs are monitored by the State Council for Higher Education in Virginia (SCHEV). This provides reviews of earnings and employment 18 months post-graduation. Additionally, SCHEV approves the system's strategic plan including specific goals related to CTE for improved student enrollment, retention and program completion.

Ongoing efforts to assess and improve postsecondary Perkins performance at the community colleges includes quarterly status reports of Perkins activities and outcomes, continued integration of local improvement plans in grant applications, and technical assistance for college faculty and personnel for the purpose of reviewing previous performance outcomes for each college and developing strategies to address areas where local colleges can better achieve and exceed performance benchmarks.

During 2015-2016, the VCCS initiated annual onsite Perkins Performance reviews. Colleges completed a comprehensive self-assessment and are ranked according to a scoring rubric to provide a numerical comparison of performance. Three colleges are selected annually to undergo an onsite Perkins monitoring review. Selected colleges are provided with written a detailed report of the review findings and recommendations for improvement. These colleges are required to provide specific progress reports for the next twelve months on a quarterly basis.

Annually, the VCCS compiles state and individual college performance reports for all postsecondary Perkins performance measures. The reports are presented to the Virginia Department of Education Board at the conclusion of the award year.

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

Secondary

Technology Training and Industry Credentials – Virginia provided multiple opportunities for CTE teachers to learn more about technical skills and industry certifications for the classroom. These opportunities included: regional training sessions for implementation of Microsoft Imagine Academy, summer professional development conferences provided training and were attended by approximately 1,247 teachers; the majority of the conferences offered hands-on computer labs whereby teachers trained and/or tested earning additional industry credentials.

Virginia's Educational Resource System Online (VERSO) - The CTE Resource Center continues to offer current, readily accessible information through this online curriculum management system. VERSO stores each piece of information with metadata attached. The system generates reports that pull from this metadata and assembles the results in a Web-based format. The data can be used multiple times in various formats and sent to multiple reports/locations on the Web. The 16 career clusters drive the entire system, which better aligns Virginia CTE courses with the national clusters that are used at the federal level for organizing and reporting all data pertaining to CTE.

Career Planning Guide (CPG) and Administrative Planning Guide (APG) – In collaboration with the state CTE specialists, developed and managed by the CTE Resource Center, the CPG and APG use much of the online VERSO data to provide students, parents, and school counselors with a system for exploring career interests and scheduling correlated courses and to provide educators with the course-specific data for administering all state-approved CTE courses in local school divisions.

CanDo – The CanDo software, developed by Arlington County Public Schools in collaboration with School Tool, an industry-based foundation, allows teachers to use technology to track student attainment of course competencies. This online system is available to all school divisions in Virginia, with training and support provided by the CTE Resource Center. By June 30, 2016, 42 school divisions were using the system.

During 2015-16, the CTE Resource Center's Web Activity had a total of 2,344,451 page views (About /Home-68,527, Services-10,431, Library-6,444, Links-7,876, Career Planning Guide (CPG)-45,043, Administrative Planning Guide-109,212, VERSO-2,093,874, and CanDo-3,044).

Online Classes – The Virginia Department of Education has developed an online version of the Economics and Personal Finance course. It covers all the Standards of Learning (SOL) for Economics and Personal Finance and reflects the corresponding curriculum framework. This course is accessible through the Virtual Virginia program and is available to all school divisions as online, face-to-face, or blended instruction. The course is structured in two primary parts: (1) a series of media-rich instructional modules that employ underlying engines that make instruction engaging and learning relevant for students and (2) an overarching simulation/game that helps students practice acquired skills and knowledge. The course can be used in a self-paced, self-contained manner or to supplement teacher instruction. Plans are to review the course within the 2017 academic year to ensure that the online course remains current and aligned with state and national standards.

A contemporary and interactive information portal, known as Trailblazers (hosted by the University of Virginia, Weldon Cooper Center) was upgraded as a resource portal for teachers and administrators to access materials for expanding educational and employment/career opportunities, regardless of gender. The portal also provided research-based occupational and employment information and resources relevant to CTE course development and program planning. <http://www.ctetrailblazers.org/>

Virginia Education Wizard (a multi-agency collaboration) – The Virginia Education Wizard is a web-based portal that has been developed to help students explore careers, find college majors, estimate and compare college costs, find and apply for financial aid and scholarships, plan their transition, and apply for admissions to postsecondary education institutions. Interests, skills, and values assessments are available and provide career pathway information for users. During 2015-2016 there were 4,573,665 page views, 556,051 visits/sessions, 396,446 unique visitors/users, 89,799 overall accounts created with 25,102 new K-12 accounts created.

VDOE annually develops and revises a technology-enriched equipment list for local divisions to use. Each cluster area specialist contributed to a technology-enriched equipment list for high-demand, high-wage, and high-skill careers. The equipment list encourages divisions to purchase and use the newest technology and equipment throughout career and technical education courses.

During the reporting year, work was begun on a Cybersecurity Fundamentals course for grades 9-12 which will be technology-driven and technology enhanced.

During the reporting year, professional development for the instructors for the CyberCamps integrated technology throughout Career and Technical Education and the academic courses. Approximately 300 educators participated in a two-day problem-driven training process facilitated by the Cyber Innovation Center (CIC), National Integrated Cyber Education Research Center (NICERC).

Postsecondary

The VCCS annually conducts a state-wide, three day professional development New Horizons Conference for faculty, counselors, and administrators in the use of technology to improve in-class instruction and to expand effective instruction and outreach through on-line distance learning and multimedia methodologies.

Developed and managed by the VCCS, the Virginia Education Wizard is a highly integrated state-wide, web-based portal designed to assist both secondary and postsecondary students in career and college advising. Designed with career pathways in mind, the Wizard is a free and effective service for students to assist them in career exploration and career direction. Current programs of study provide users with clear paths to careers and occupations.

The VCCS also conducts an annual Virginia Workforce Professionals Academy. Formally known as the Career Coach Academy, this three-day program has been expanded to include not only career coaches from more than 150 public Virginia high schools but, also, WIOA professionals throughout Virginia with training on new and developing technologies to improve effectiveness in providing students and clients with comprehensive career services including career exploration and career pathways.

Experiential Learning: cooperative education, internships, and other forms of on-the-job exposure and training are provided at all 23 Virginia community colleges. Collaborations with professional associations, industrial organizations, and community groups such as workforce investment boards and local chambers of commerce have proved to be an effective means by which to initiate and develop relationships with Virginia's business and industry sectors.

Mentoring programs are rapidly increasing at many of the system's colleges. A prime example is the collaboration between Virginia Western Community College's Women in STEM student support group and the Roanoke-Blacksburg Technology Council. In only starting its second year, this partnership currently has 27 female STEM students paired with female mentors from the region's career and technical occupational fields.

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

Approximately 1,247 teachers participated in content specific professional development offered through all eight program areas (Agricultural Education -127, Business & Information Technology -201, Family & Consumer Sciences - 246, Health & Medical Sciences -175, Marketing -142, Technology Education -165, and Trade & Industrial Education 191) via summer professional development conferences. This number includes 82 participants in six face-to-face hands-on Microsoft Imagine Academy computer training opportunities for teachers and administrators for certification.

During 2015-2016, a total of 365 high schools/CTE centers participated in the Microsoft Imagine Academy (MIA), 711 teachers earned Microsoft certifications and 275 teachers earned the Microsoft Office Specialist Master Certification.

Within the Business and Information Technology Summer Professional Development Conference, the following content specific workshops were held: Keyboarding—Now What? (20 participants); FBLA Adviser Professional Certification Program (16 participants); Whole Brain Living (10 participants); Economics and Personal Finance instruction techniques and resources (30 participants); Performance Based Assessments (10 participants); CTE Recruitment Roundtable (10 participants); Google Apps (20 participants); Project Lead the Way (20 participants); Hour of Code (20 participants); Social Media (20 participants); STEM (10 participants); numerous instructional vendor sessions; subject area roundtables; CLEP (20 participants); and IB Business curriculum (15 participants).

Additionally, approximately 305 CTE teachers and administrators participated in the following regional professional development:

Microsoft Imagine Academy offered two regional professional development training workshops (53 participants); Microsoft Imagine Academy offered six GMetrix training workshops (82 participants) in conjunction with the professional association conferences; Microsoft Technology Associates (MTA) Bootcamp (20 participants); Counseling for Careers offered two workshops (150 participants).

In addition, the Office of Career and Technical Education collaborated with other instructional units within the VDOE to include CTE teachers in conferences and video conferences on Economics, Financial Literacy, Reduction of Dropout Rates, College Access and Success and Academic and Career Plan Implementation.

Video-Streamed Training Series for CTE Administrators – Fifteen training sessions were conducted during the 2015-2016 school year for new and experienced CTE administrators. These sessions replace the typical two-day annual training for new CTE administrators. The goal is to support CTE administrators throughout the school year with sustained professional development on the responsibilities of the CTE administrator and identify resources. Topics offered included: Navigating the VDOE and CTE Resource Center Web Site, Health and Safety and Department of Labor and Industry Regulations; CTE Federal Program Monitoring: Self-Assessment and Civil Rights Reviews, Career Development and Academic and Career Plans of Study; Implementing Career Clusters; Financial Information, Reimbursements, and Reports; Local Plan and Budget Submission; Education and Business Engagement: Expanding Opportunities for Students; Digital Badges: Validating Achievement of Workplace Readiness Skills for the Commonwealth Credential; Completer Follow-Up; End of Year Financial Reports; Master Schedule Collection, Spring and End-of-Year Student Record Collections, and CTE Student Performance Reports; and Industry Credential Data Collection.

The Trailblazers web portal (hosted by the University of Virginia, Weldon Cooper Center) provides professional development resources on nontraditional, occupational, and employment topics including labor market data and employment projections; earnings and education by career cluster; and other topics of interest such as child labor laws pertinent to work based learning. In addition, University of Virginia researchers presented to meetings of new administrators.

Virginia Career VIEW – Resource website that supports the following Virginia Department of Education initiatives: Virginia College and Career Readiness; and promotes career development materials focused on Engaging Parents in Career Exploration and the Academic Career Plan - STEM Toolkits. The total website hits: 142,962,526; average hits per day: 392,044; average users per day: 5,906; and total visiting users: 1,583,281.

Virginia Career VIEW conducted a total of six (no cost) workshops throughout the Commonwealth providing free CEU's from Virginia Tech's School of Education to 122 participants. Workshops were conducted in Abingdon, Fredericksburg, Virginia Beach, Williamsburg, Midlothian, and Roanoke. Virginia Career VIEW conducted outreach throughout the Commonwealth to a total 11,391 individuals including 5,746 students, 2,178 Professionals, and 3,467 Parents. Outreach events included state conferences, Richmond City-wide School Counselor's training, VT Collaborative events such as STEM Up, the Virginia Science Festival, the Virginia Tech Kindergarten to College Program, Virginia Tech's Kids Tech University and various school visits for career days and faculty training. This is the highest outreach in Virginia Career VIEW's 36 year history increasing totals from last year by 60.4%. Our total website hits are also the highest in VIEW history increasing by 23.18% from last year.

New Teacher Institute – A weeklong institute is held annually for new career and technical education teachers. The goal is to help highly qualified professionals transfer technical knowledge from workplace to classroom instruction. The institute is led by the University of Virginia professors and upon completion of the course requirements; teachers receive three graduate credits toward their Virginia teaching license. Licensure for teaching is provided by issuing a provisional teaching license that allows three years to complete the educational requirements for a permanent teaching license. As a result, these professionals require intense staff development to assist in the transition from industry professional to a licensed teacher. In 2015, 47 new teachers participated in the New Teacher Institute.

Academic and Career Plan (ACP) – The requirement for the Academic and Career Plan became effective with 7th grade students beginning in the 2013-2014 academic year. School counselors, CTE educators, instructional personnel, and division leaders have requested training in best practices related to academic and career planning, utilizing career clusters, career pathways, and the Virginia Education Wizard. Conducted a two-part video streaming series for school counselors and CTE educators. The sessions were entitled Career Development and Academic and Career Plans of Study, Part I (10/15/15), and Career Development and Academic and Career Plans of Study: Connecting Secondary and Postsecondary Education, Part II (11/12/15).

Experience Works: A Convening of Business Leaders and Educators – A professional development opportunity targeted to Work-Based Learning (WBL) instructors, coordinators, career and technical education administrators, school counselors and career coaches was held in Richmond, June 28-29, 2016. A total of 120 participants representing program areas of Agricultural Education, Business and Information, Career Connections, Family and Consumer Sciences, Health and Medical Sciences, Marketing, Technology Education, and Trade and Industrial Education attended. Highlights included concurrent sessions featuring exemplary WBL programs, strategic discussions between business leaders and educators, and a selection of six industry tours in the Greater Richmond area.

A Work-Based Learning web page

(http://www.doe.virginia.gov/instruction/career_technical/work-based_learning/index.shtml) contains resources to help school divisions implement the seven methods of WBL instruction.

Postsecondary

Referenced in the previous response, the New Horizons Conference is the largest single professional development function for community college faculty, advisors and administrators in Virginia. This conference is held annually in April. In addition to VCCS faculty and staff, the conference also attracts business and industry leaders, state legislators and cabinet members. The conference focuses on the improvement of instruction and student services through the expanded use of technology in teaching, counseling, and administration. The conference agenda is based on scientifically based research and data to improve instruction. It is the primary source of training for VCCS personnel in the use of Blackboard, the primary method of on-line course delivery. The conference also provides training in the effective use of internet programs, data bases, and software for career advising, college advising, job placement, and the development of instructional materials. Annually, this conference attracts the largest number of private high tech educational vendors to Virginia.

The annual HIRE Education Conference is held in December. This December (2016), the conference will be conducted for the 16th consecutive year. Of critical concern to career and technical education, this professional development conference focuses on various ways that education can interact and collaborate with public and private sector employing organizations and associations. Each year, more than 400 attendees explore and examine trends, strategies, and programs that assist individuals and business/industry/government in improving workforce skills to remain competitive in a global marketplace. Attendees include representatives from VCCS colleges, workforce investment boards, economic development, business and industry, state and federal government agencies, and other workforce partners interested in expanding business and employment opportunities in Virginia.

The Virginia Workforce Professionals Academy: Previously named the Career Coach Academy, the academy was expanded in 2015 bring together high school career coaches, middle college career coaches, adult career coaches, career coach supervisors, high school and community college administrators, and WIOA professionals. The conference's expanded content concentrates not only on career pathways, effective coaching strategies, career and college resources, but now includes outreach and collaboration strategies for the greater workforce professional community. The academy remains the VCCS' major annual professional development for high school and adult career coaches. Academy follow-up is provided through regional meetings. Additionally, a career coach certification program has been fully implemented in partnership with the Virginia Community College Workforce Alliance.

In addition to the above annual professional development opportunities, there are regional meetings for career coaches and for college campus Perkins administrators to insure that Perkins performance standards are being emphasized and that progress is being monitored. CTE faculty are provided with professional development opportunities, both with on-campus and in-service training and with national organizations and associations. A number of on campus workshops addressing underrepresented genders in CTE programs were held with the professional organization, Women in Trades and Technology, at community college campuses.

The VCCS conducted its initial Perkins Nontraditional Gender Recruitment and Retention Summit on October 21st, 2015 and was solely dedicated to increasing enrollment and completion of underrepresented genders in CTE programs of study. 22 of the 23 state community colleges participated in this sharing and learning event. On October 25, 2016, the second Perkins Nontraditional Gender Recruitment and Retention Summit was conducted with all 23 community colleges being represented. This second summit concentrated on assisting the colleges to develop and implement their own college's 5P1 and 5P2 program improvement plans.

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

Nontraditional – All local school divisions are required to address activities that they will implement to attract nontraditional students into their Nontraditional Occupations (NTO) programs. This is provided in the local plan's CTEMS Schedule 3 where the activities are outlined. In addition, school divisions that do not meet standards for participation, as well as completion and credentials, must develop an improvement plan addressing how they plan to meet the standards. Virginia has been very proactive in trying to provide support for nontraditional student participation, completion, and credentialing.

Trailblazers web portal is a resource website for teachers and administrators to access materials for addressing nontraditional issues and data relevant to CTE course and program planning. On a monthly basis, documents analyzing recent labor market trends were posted on the site. Each issue addresses a specific career cluster and provides information for teachers and administrators.

Top 15 Employers in the Local Workforce Investment Area (LWIA) by Virginia School Division – These documents leverage state data to reveal the top employers in each locality, as well as each broad Local Workforce Investment Area, and are distributed via OCTES website http://doe.virginia.gov/instruction/career_technical/statistics_reports/labor_mkt_data/index.shtml

Special Populations – Data is collected on all federally identified special populations through Performance Standards. Each year local school divisions are provided with an Annual Performance Report by school and division that is utilized in planning the expenditure of Perkins funds to localities. CTEMS Schedule 3 requires school divisions to describe how they will annually review career and technical education programs, and identify and adopt strategies to overcome barriers that result in lowering rates of access to and lowering success in program for special populations.

Postsecondary

The VCCS state-wide Administrator for Postsecondary Perkins Programs is a member of the Methods of Administration Compliance (MOA) review team. MOA compliance reviews are conducted annually at selected community colleges on a rotational basis to insure that college facilities, procedures, and opportunities provide for equitable representations of special populations including nontraditional students. Responsible VCCS monitoring staff annually attends the four-day training provided by the USDOE Office of Civil Rights each April.

The Virginia Institute for Excellence program provides funding for the development of programs of study that meet the state's need for workforce education and training in emerging career fields. A primary example of this is the current push establishing cyber security programs to meet the rapidly expanding needs of both public and private organizations in Virginia and surrounding states including Washington D.C. Annually, funds are awarded to local community colleges to stimulate the development and improvement of in-demand, non-credit and credit, CTE programming.

All 23 of the local community colleges have staff identified to serve as advocates for special population applicants and students. These designees are responsible for resolving complaints, insuring adherence to anti-discriminatory policies and that such policies are publically available.

The main process for quality assurance of VCCS CTE programs is the system-wide annual review and assessment process. Subsequently, as relates directly to Perkins, there are additional reviews for all of the individual VCCS colleges system-wide.

Each local college actively participates with external populations with interests in supporting, initiating, and expanding CTE programs. Such active involvement benefits CTE programs and students by providing workforce relevance, materials and equipment acquisition, student and graduate employment, internships, cooperative education, mentoring, and curriculum development. CTE program advisory committees are prominent in this process.

The VCCS is very proactive in integrating career exploration and planning through Career Pathways beginning at the middle school level and continuing through postsecondary. This is evidenced by the Governor of Virginia creating a position within his office to oversee the institutionalization of Career Pathways throughout the state's secondary and postsecondary public education systems including both academic and CTE career paths.

A primary focus of the previously mentioned annual New Horizons conference is the integration of academics and skills training in high tech career programs and the presentation of scientifically based research and data for the improvement of instruction and student support.

As previously mentioned, the first Perkins summit concentrated on underrepresented genders in CTE. All participating colleges reported on their efforts to attract and retain nontraditional genders in their CTE programs. An emphasis going forward will be the creation and expansion of on-campus support groups such as the Women in STEM at Virginia Western Community College that supports persistence of female students in technical programs and provides active mentoring and recruitment efforts. All colleges are being required to submit individual college improvement plans for increasing the participation and retention of nontraditional genders in CTE programs in January 2017.

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

Virginia has full inclusion of students with special needs in both academic and elective courses, which includes Career and Technical Education (CTE). Special education teachers collaborate with CTE teachers and administrators to help ensure that special education students have the opportunity to participate in CTE classes offered within the school/division according to goals in their Individualized Education Plan (IEP). Technical assistance to teachers is provided through the cooperation of the special education and CTE offices within the VDOE. They utilize such resources as Virginia Career VIEW, <http://www.vaview.org>, Virginia Education Wizard, www.vawizard.org, and TrailBlazers

http://www.ctetrailblazers.org/live_data/live_site_page.php. CTE and special education teachers and administrators are encouraged to attend professional development opportunities offered through the Virginia Department of Education. CTE professional associations' summer conferences, the Virginia Transition Forum, webinars, and video streaming sessions assist CTE and Special Education personnel in the implementation of best practices when assisting students with academic and career planning.

In addition to providing funding for adaptive equipment and resource personnel (including interpreters and tutors) for special populations, the VCCS utilizes the Virginia Education Wizard online tool to assist students with disabilities to access secondary and postsecondary and position them to gain employment upon graduation. 2015-2016 school year, of the 293,788 CTE students, 155,148 special population students have access to the approximate 350 CTE credentialing tests in accordance with their IEP or 504 Plan.

Postsecondary

Please reference comments regarding MOA and the Virginia Institutes of Excellence program included above.

Summer camps and workshops are effective methods to introduce special populations and underrepresented gender populations to career and educational opportunities in non-traditional fields. Such programs have been provided at VCCS campuses for middle and high school students exposing participants to STEM career opportunities such as engineering and engineering technology, various electrical and mechanical trades, and health sciences such as nursing and emergency medical technician among others. External organizations such as the Virginia Manufacturers Association and the Virginia Energy Council are actively involved.

PLUGGEDINVA is an example of a targeted program to support special populations and to direct their progress towards in-demand, high wage positions in Virginia (see 6R below).

AS previously mentioned, the Virginia Education Wizard is an effective on-line program to assist all students, special population students included, in conducting career and college exploration for in-demand opportunities and to assist them in decision making and direction.

The VCCS provides funding for adaptive equipment and resource personnel, including interpreters and tutors for special population students.

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

Secondary

Among its many technical services, the Office of Career and Technical establishes, collects, and disseminates performance information to the local school divisions; awards grants to local school divisions for STEM activities; coordinates transition activities with postsecondary institutions; coordinates activities with other workforce agencies; coordinates curriculum efforts through the Virginia Career and Technical Education Curriculum Resource Center; provides technical services to teachers and administrators; provides presentations on career clusters/career pathways/programs of study; and provides professional development for school personnel.

Conducted a two-part video streaming series for school counselors and CTE educators. The sessions were entitled Career Development and Academic and Career Plans of Study, Part I (10/15/15), and Career Development and Academic and Career Plans of Study: Connecting Secondary and Postsecondary Education, Part II (11/12/15).

Responded to inquiries from school divisions on the selection of appropriate industry certification exams administered to students as they align to pathway courses for a certain occupation/career path.

Postsecondary

The Virginia Education Wizard developed under the leadership of the VCCS is a direct result of collaboration and partnership between and among the VCCS, the Virginia Department of Education, the State Council of Higher Education, and the Virginia Employment Commission, as well as other organizations.

PLUGGEDINVA, is a career pathways program that provides adult learners with a contextualized GED curriculum integrated with industry-specific technical training as a means to develop essential workplace skills for entry-level jobs in targeted high demand industries. The pathways progress from the GED credential to a Career Readiness Certificate to industry recognized certifications and beyond. The partnership for this program includes the VCCS, Virginia Commonwealth University, and the Virginia Department of Education's Office of Adult Education and Literacy.

Partnerships involved with the VCCS in developing, promoting, and presenting the summer camps and workshops noted in 5R above include NASA, Women in Technology, the Virginia Manufactures Association, the Virginia Energy Workforce Council, and others.

The VCCS provides technical assistance to its 23 community colleges including the following:

1. Collecting and disseminating performance progress information.
2. Coordinating formal and informal collaborative activities between the local colleges and other workforce agencies and organizations.
3. Providing professional development opportunities for community college personnel.
4. Providing administration leadership and college performance progress monitoring.

7. Serving individuals in state institutions

Part I: State Correctional Institutions

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

220000

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

8492

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

Secondary

Virginia Department of Corrections

The Virginia Department of Corrections (VADOC), Division of Education serves as a local education agency for incarcerated adults housed in state operated adult correctional facilities throughout the state of Virginia. All academic and career and technical education (CTE) teachers meet state certification and endorsement standards. Programs are geared toward helping individuals realize their potential through educational programs to become productive members of society when released from facilities. During the past year VADOC continued operating a number of dual enrollment programs through a partnership with the Virginia Community College System (VCCS). This included Business Software Applications, Computer Systems Technology, CAD/Drafting, Masonry, Commercial Foods, and HVAC. VADOC now has agreements in six adult facilities for 16 programs. Agreements continue that enable the schools to provide testing from Pearson VUE for CompTIA A+, Certiport for the Microsoft Office Specialist, and NOCTI for the Residential Construction Academy for several programs to include Carpentry, Plumbing, Building Maintenance Repair, Electricity, and HVAC trade areas.

As part of VADOC's efforts to expand postsecondary opportunities, apprenticeship programs were expanded. A total of 781 apprentices were registered with a total of 63 apprentices completing their programs. A variety of programs are available, depending on the opportunities for establishing them at a particular prison. We were also able to get five CTE programs recommended through the ACE.

Industry based certifications continued to be emphasized in spite of the difficulty of offering some of the exams inside prisons. Last year VADOC had a total of 414 industry based certifications. These credentials provide external verification of student skills. Students are not allowed direct Internet access. This makes certification testing much more involved, especially if it is computer based.

During the 2015-2016 school year, the VADOC offered CTE programs to adult inmates at 41 adult correctional facilities in 37 different program areas in three occupational trade areas. Educational evaluation and assessments are conducted at reception centers. During the 2015-2016 school year, VADOC had 8,126 adult enrollments with 2344 course completions. Students enroll at any point in the year rather than at a specific time of the year. This is necessary because of the constant entry and exit of offenders into and out of the system, and the transfer of offenders within the system.

During the 2015-2016 school years, the VADOC CTE central office administration continued to conduct on-site school evaluations of adult CTE programs. These evaluations are designed to look at all aspects of the instructional program and operating procedures to ensure that programs are operating in an appropriate and safe manner, and that they comply with all established standards.

Virginia Department of Juvenile Justice

The Virginia Department of Juvenile Justice/Division of Education (DJJ-DOE) serves as an independent school district for the Yvonne B. Miller High School. DJJ-DOE operates in cooperation with the Virginia Department of Juvenile Justice and the Virginia Department of Education in the provision of Career and Technical Education.

During the 2015-2016 school year, the DJJ-DOE offered CTE programs to juveniles at the Y.B. Miller High School Bon Air and Beaumont campus locations. Programs included 9 different courses focusing on 10 cluster areas for secondary students. DJJ-DOE had 366 students enrolled in at least one Career and Technical Education course during the 2015-2016 school year. Due to the length of stay of its students, 295 of the students were enrolled for the entire duration of the course. Four students were able to reach completer status.

Industry-based certifications continued to be emphasized with a limited implementation of the Workplace Readiness Skills test. Additional exams included the ServSafe Manager Certification Examination and the VA Board for Barbers and Cosmetology. The DJJ-DOE continues to work with the Information Technology Division to expand assessment offerings in the 2016-2017 to ensure students meet the graduation requirements and be prepared for the transition back into their communities.

During the 2015-2016 school year, the DJJ-DOE central office administration conducted an onsite school evaluation of its CTE programs. This evaluation assessed all aspects of the instructional program and operating procedures. Conclusions from the evaluation resulted in adjustments to the program course offerings, staffing, competency attainment, credit acquisition, and curriculum, instruction, and assessments.

Postsecondary

For the past several years, the VCCS has annually served in excess of 2,500 inmates of Virginia's correctional facilities to qualify for a Career Readiness Certificate certifying their basic workplace skills and received this nationally recognized credential designed to assist job seekers. These assessments were offered by the VCCS through Southside Community College with funding support from the Virginia Department of Corrections.

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.

Perkins funds were not used to support state institutions serving individuals with disabilities.

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

No

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

Yes

Secondary

Family and Consumer Science programs were offered in 555 schools (middle and high schools) with a total enrollment of 125,023 (duplicated count).

Training sessions were offered during the Family & Consumer Sciences summer professional development conference. All workshops were aligned to the related career cluster.

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

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Virginia

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

Correlation of Virginia Standards of Learning (SOL) and CTE Instructional Resources and Guides – Virginia academic and CTE specialists continue to review every CTE course and correlate each task to the SOL for Mathematics, Science, English, and History/Social Science, where appropriate. Since its gubernatorial mandate in 2002, this academic standards correlation has been a part of each CTE task list and its attendant framework. Whenever a CTE course is revised, the academic correlations are also reviewed and adjusted as needed.

Virginia Education Resource System Online (VERSO) Resources – Within VERSO there are many resources that integrate academic and CTE instruction. First, the tasks for each CTE course in Virginia are correlated to the four core academic SOL, when appropriate. Courses in VERSO also have a variety of resources that address academic and CTE integration, including process/skill questions, scenarios, and lesson ideas.

Career Pathway Development – Virginia has developed sample career pathways programs of study (plans of study) for each of the 79 nationally identified career pathways. We also have teamed academic and career/technical specialists to develop career pathways programs of study that are identified as a combined academic/CTE specialty area (i.e., Journalism – English, Business & Information Technology, and Trade & Industrial Education) or a Fine Arts/CTE specialty area (i.e., Graphic Design). In 2011, a checklist was developed to better guide stakeholders in the development of local sample plans of study that meet all Perkins criteria. The checklist is available on the CTE Website (http://www.doe.virginia.gov/instruction/career_technical/career_clusters/) along with the state sample templates. The Web pages for clusters and pathways were expanded in 2013-2014 to provide individual pages for each of the 16 clusters. The pages are updated annually to contain descriptions, student spotlights, occupational data, programs of study samples, and career cluster planning and marketing resources. All CTE courses are aligned with one or more career clusters and career pathways within those clusters and are available online in a variety of guidance documents for stakeholders.

Academic and Career Plan (ACP) – Career and Technical Education staff continue to work with academic specialists, stakeholders, and other educators throughout the Commonwealth to provide guidance and resources for the Academic and Career Plan (ACP) graduation requirement. The ACP meets the Perkins criteria for a career pathway program/plan of study.

Enacted by the 2009 General Assembly, the Board of Education included in its 2009 revisions to the Regulations Establishing Standards for Accrediting Public Schools in Virginia, (8 VAC-20-131-5 et seq) provisions for each middle and high school student to have a personal learning plan that aligns academic and career goals with the student's course of study. Beginning with the 2013-2014 academic year, all schools shall begin development of a personal Academic and Career Plan for each seventh-grade student with completion by the fall of the student's eighth-grade year. Students who transfer from other than a Virginia public school into the eighth-grade shall have the Plan developed as soon as practicable following enrollment. Beginning with the 2014-2015 academic year, students who transfer into a Virginia public school after their eighth-grade year shall have an Academic and Career Plan developed upon enrollment.

The components of the Plan shall include, but not be limited to, the student's program of study for high school graduation and a postsecondary career pathway based on the student's academic and career interests. The Academic and Career Plan shall be developed in accordance with guidelines established by the Board of Education and signed by the student, student's parent or guardian, and school official(s) designated by the principal. The Plan shall be included in the student's record and shall be reviewed and updated, if necessary, before the student enters the ninth and eleventh grades.

Infusion units: Infusion units are optional instructional units that have been developed for teachers to add to an already existing curriculum framework. The infusion units offered are: Aquaculture, Customer Service, Cyber Security Foundations, Social Engineering and Personal Cyber Security, Cyber Forensics, Entrepreneurship, and Green Building.

Cybersecurity Career Pathway – During 2015-2016, work began for the development of a Cybersecurity curriculum framework. Experts from business and industry, along with representatives of higher education and k-12 educators met to outline the commonwealth's needs and to address building a workforce pipeline that starts with K-12 and prepares students for cybersecurity careers and advanced education.

During 2015-2016, the Center hosted 44 meetings for Henrico County Public Schools. Approximately 1,000 business representatives participated.

The Workplace Readiness Skills for the Commonwealth and Examination – Virginia has included workplace readiness skills in every CTE course since 1999. In June 2010, the Office of CTE announced the revision of these skills, which was undertaken with assistance from UVA's Weldon Cooper Center, the Career and Technical Education Consortium of States (CTECS), and the CTE Resource Center (CTERC). After an extensive literature review, research, and compilation of a revised list of skills, business/industry representatives from across the Commonwealth validated the updated list. The new 21 skills then were incorporated in the content of every CTE course as the first 21 tasks, effective for the 2010-2011 school year. These skills are correlated to the Virginia Standards of Learning and are accompanied by extensive teaching resources. During 2010 - 2011, information and activities pertaining to sustainability were infused throughout the 21 skills. The VDOE in collaboration with CTECS developed a credentialing exam to complement the updated 21 Workplace Readiness Skills, Workplace Readiness Skills for the Commonwealth Examination. The Board of Education approved this credential as a "stand-alone" examination towards a student-selected verified credit at its February 17, 2011, meeting. This online examination was field tested and became effective beginning spring 2011. It is designed to measure the 21 workplace readiness skills that are a required component of each CTE course. Students may earn a student-selected verified credit by passing this examination. The Workplace Readiness Skills for the Commonwealth Examination is an optional credentialing test that can be administered with any CTE course. Beginning with first-time ninth grade students in the 2013-2014 school year, requirements for the standard diploma shall include a requirement to earn a career and technical education credential that has been approved by the Board, that may include, but not be limited to, the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia Workplace Readiness Skills Assessment.

In 2014-15, the CTE Resource Center hosted a two-day meeting with Career and Technical Education Consortium of States (CTECS) representatives and 23 educators to review, revise, and build questions used on the Workplace Readiness Skills for the Commonwealth Examination. The Center also began an extensive review of existing Workplace Readiness Skills resources for each of the competencies and added or updated those resources. The Workplace Readiness Skills for the Commonwealth examination will satisfy the graduation requirement. During 2014-2015, 39,705 students participated in this test and 28,349 (71.40 percent) passed. The maximum score possible is 100 of which the students' mean score was 76.96. During 2015-2016, 45,485 students participated in this test and 30,775 (67.66 percent) passed.

High Schools That Work - High Schools That Work/Making Middle Grades Work – High Schools That Work (HSTW) and Making Middle Grades Work (MMGW) are the Southern Regional Education Board's (SREB) comprehensive school improvement reforms. Effective June 30, 2015, VDOE funding allocation for HSTW/MMGW ended.

Economic Education and Financial Literacy – Effective with the ninth grade class entering in 2011-2012, all students must earn one credit in Economics and Personal Finance as a graduation requirement. Through collaboration with CTE, History and Social Science, and Mathematics, Standards of Learning have been developed for the Economics and Personal Finance course and approved by the Board of Education; and course competencies have been developed and approved by teachers and a business and industry panel. Curriculum Frameworks for CTE teachers and for History and Social Studies teachers have been developed and posted on a shared Economics and Personal Finance website. The course competencies and Standards of Learning were reviewed and revised during this reporting period. The review identified a lack of information about funding postsecondary education and training and the course was enhanced to include that section. An interactive online resource website, TeachingMoneyVa.org, has been developed through collaborative efforts of CTE teachers and supervisors, academic teachers and supervisors, the Richmond Federal Reserve Bank, professional association representatives, and members of the financial services community.

An online version of the Economics and Personal Finance course has been developed and is available at no cost to public school divisions through Virtual Virginia. The online course is also available as I-books for purchase by local divisions or as a free PDF for download. All of these efforts involve academic and CTE teachers.

Office of Career and Technical Education provided training through Southern Regional Education Board for Project-Based Learning planning and implementation. There were 25 participants.

Virginia Education Wizard – A function within the Wizard allows educators to create and maintain Academic and Career Plans (ACP) electronically. Administrators can create reports from the data stored in student accounts for planning and administrative purposes.

All students enrolled in career and technical education courses are members of the local CTSO related to their courses and area of interest and are provided with opportunities to apply academic, technical and employability knowledge and skills necessary in today's work force. During 2015-16, over 67,000 Virginia students participated in leadership experiences through DECA, FBLA, FCCLA, Educators Rising, FFA, HOSA, SkillsUSA and TSA. CTSOs extend Career and Technical Education in Virginia through networks of programs, business and community partnerships and leadership experiences at the school, state and national levels.

Postsecondary

The New Horizons Conference (discussed in STEP 3: Part B), is partially supported with state leadership funds. As noted previously, New Horizons is the premier professional development for VCCS faculty, counselors, and administrators in the use of technology to improve in-class instruction and expand effective instruction and outreach through on-line distance learning and multimedia methodologies. Providing challenging and rigorous programs of study through the integration rigorous academics with career and technical education is the underlining emphasis of the conference.

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

Automotive Youth Education Services (AYES) – The Office of Career and Technical Education Services continues its partnership with the Virginia Automobile Dealers Association and the Automotive Youth Educational Services (AYES). Virginia was one of the first states to adopt this partnership model that includes a manufacturer, retailer and educator all working together to provide students the opportunity to develop skills needed for a successful career in automotive technology. This partnership has enhanced both the curriculum and the equipment in auto technology labs and provided students with mentoring experiences and internships in local auto dealerships.

Virginia Business Publications LLC – R U College & Career Ready Magazine – The Office of Career and Technical Education's partnership with the Virginia Business Magazine provides a new streamlined program to help students learn the process of career choice. Components of this initiative include: the R U "College & Career" Ready? magazine for high school sophomores, a teaching companion resource guide with lesson plans for use in the classroom, and a Parent's Guide to assist 7th grade students with college and career preparation. During 2015-2016, approximately 118,000 magazines were distributed to high school students statewide.

The magazine highlights the 16 career clusters by showcasing Virginia CTE graduates and includes career tips, and tools, and provides information for students on the importance of making wise course taking decisions. Career planning information is presented formally to students through a classroom guidance activity and by offering instruction as an extracurricular activity in collaboration with business/industry and postsecondary education partners. Additionally, these resources are available on the Virginia Department of Education Web site and may be downloaded from the CTE Resource Center's Web site.

Project Lead the Way (PLTW) – A four-year sequence of courses which, when combined with college preparatory mathematics and science courses in high school, introduces students to the scope, rigor, and discipline of engineering and engineering technology prior to entering college. The core courses are Introduction to Engineering Design and Principles of Engineering. Students can take specialization courses of Digital Electronics, Computer Integrated Manufacturing, Civil Engineering and Architecture, Aerospace Engineering and Engineering Design and Development. These provide pathways for students to narrow their interests. The School of Engineering at Old Dominion University represents the state as the university affiliate for providing graduate courses to prepare teachers to implement PLTW. Technical update workshops are provided annually for teachers, administrators and guidance counselors. As of 2015-16, there are 81 PLTW programs in Virginia. Local school divisions have begun offering the PLTW Biomedical Sciences program and the Computer Science program.

Microsoft Imagine Academy – The Virginia Department of Education continues its partnership with Microsoft to provide the Microsoft Imagine Academy (MIA) program. Through funding provided by the General Assembly, the MIA program is in its fifth year. The program offers many unique 21st century education benefits and fully prepares students to obtain internationally recognized IT industry certifications. During 2015-2016, the academy is in 365 high schools/CTE centers, serving nearly 50,000 students. The MIA program includes an annual subscription for digital curriculum and instructional resources to prepare students with industry-recognized skills and certifications to meet the rising technology needs of business and industry. Additionally, participating high schools and CTE centers receive a twelve month site license for unlimited certification testing at no cost to school divisions for the Microsoft Office Specialist (MOS) applications (Word, Excel, PowerPoint, and Outlook), and the GMetrix practice exams for all of the MOS applications. Also, a limited number of exam vouchers for the Microsoft Technology Associate (MTA) certifications were available to all schools/centers, but distributed as needed. During 2015-2016, a total of 17,672 certifications were earned as follows: of the total, 16,961 earned by students and 711 earned by teachers; and 275 students earned the Microsoft Office Specialist (MOS) Master Certification and 19 teachers earned the MOS Master Certification.

Governors STEM Academies – The Office of Career and Technical Education provides leadership and coordination of activities with the Virginia Secretary of Education, the Virginia Career Education Foundation and the State Council of Higher Education for Virginia, and Virginia Secretary of Education to continue the Governor's Science, Technology, Engineering, and Mathematics (STEM) Academies which also include the CTE Exemplary Program evaluation process. Twenty-two academies have been established since the beginning of the initiative in 2007-2008 school year.

Governor's Health Sciences Academies – The Office of Career and Technical Education provides leadership and coordination of activities with the Virginia Career Education Foundation, State Council of Higher Education for Virginia, and Virginia Secretary of Education to establish the Governor's Health Science Academy initiative which also includes the CTE Exemplary Program evaluation process. Eight academies have been approved since the beginning of the initiative of in 2012-2013 school year.

The Governor's Academies are programs designed to expand options for the general student population to acquire critical skills, knowledge and credentials that will prepare them for high-demand, high-wage, and high-skill careers. All academy programs must include significant work-based learning and training beyond the classroom using instructional methods such as cooperative education, internships, clinical experiences, job shadowing, mentorships, or service learning.

Virginia Jump\$tart Coalition – The Virginia Jump\$tart Coalition is a nonprofit, volunteer-driven organization representing more than 100 individuals and organizations in business, government, association/nonprofit and education who have joined together to improve the financial literacy of Virginians. Two members of the Virginia Department of Education—one from Business and Information Technology and one from History and Social Studies—represent the VDOE on the coalition. The Business and IT specialist serves on the Board.

Financial Services Group – A group of business and industry representatives has provided knowledge, assistance, and financial support for the economics and personal finance initiative. Member organizations of the group provide funding for the online instructional resources Web site and for the major portion of funding for the Virtual Virginia online Economics and Personal Finance course. Members of this group also participate in curriculum revision initiatives for Career and Technical Education in Virginia.

Virginia Society of Certified Public Accountants (VSCPA) – Representatives from the VDOE work with the VSCPA annually to plan and present a Financial Literacy Summit for secondary teachers. Over 200 teachers participated in 2013, 2014, 2015, and 2016. Other sponsors have provided nationally acclaimed speakers, such as Michelle Singletary, as the keynote speaker at this free event open to all Virginia teachers.

Virginia Credit Union League – Several credit unions have made available regional training with emphasis on instructional resources to help with instruction in the Economics and Personal Finance course. The Credit Union League also provides training and start-up kits for the statewide Banking in the Schools program. The Business and IT Specialist was a presenter at two of the regional training workshops during the reporting period with over 50 teachers in attendance at each. VDOE provided a judge for the Virginia Credit Union League statewide competition for community service for the member credit unions.

Virginia Council on Economic Education—Virginia Council on Economic Education provided workshops and professional development for teachers in preparation for teaching the Economics and Personal Finance course and preparing to take the teacher credential for Personal Finance (W!SE). During the 2015-2016 year, over 1,763 teachers were trained during 125 workshops and presentations. Training was also provided through this partnership for teachers to use the Stock Market Game in their classrooms; over 100 teachers were trained and participated in the Stock Market Game. VDOE was represented at the Economic Awards Luncheon sponsored by the Virginia Council on Economic Education by the Business and IT specialist, a former recipient of the Outstanding Economic Educator of the Year award.

Longwood University-The Office of Career and Technical Education (VDOE) worked closely with Longwood University to develop and implement a dual enrollment Economics and Personal Finance course. The course was offered during the past two summers and was a tremendous success. Plans are to continue and expand this dual enrollment offering.

Radford University—The Office of Career and Technical Education (VDOE) worked with Radford University in the development of the Cybersecurity Fundamentals curriculum and promoted teacher professional development from Radford offered online free to Virginia teachers.

Virginia Extension Service (Virginia Tech)—VDOE provided a judge for the LifeSmarts competition for students to compete for state recognition and an opportunity to compete at the national level.

Virginia Association of Secondary School Principals—Office of Career and Technical Education provided workshop and roundtable presenters at the VASSP conference on Economics and Personal Finance and other topics as requested by the administrators.

Postsecondary

No

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

Yes

Secondary

Academic and Career Plan (ACP) – The requirement for the Academic and Career Plan became effective with 7th grade students beginning in the 2013-2014 academic year. School counselors, CTE educators, instructional personnel, and division leaders have requested training in best practices related to academic and career planning, utilizing career clusters, career pathways, and the Virginia Education Wizard. Conducted a two-part video streaming series for school counselors and CTE educators. The sessions were entitled Career Development and Academic and Career Plans of Study, Part I (10/15/15), and Career Development and Academic and Career Plans of Study: Connecting Secondary and Postsecondary Education, Part II (11/12/15).

Postsecondary

As described in STEP 3: Part B, state leadership funds are used to support expansion and emersion of high school career coaches and adult career coaches to assist secondary students and returning adult students in career exploration and decision making. State Leadership funds are used to partially support the administrator for the career coaching program. Additionally, state leadership funds have been used to develop and continuously improve the Virginia Education Wizard, the state's primary web-based portal designed to assist secondary, postsecondary, and adult students in career and education exploration and planning.

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

Dual enrollment and articulation agreements (secondary and postsecondary effort) – The 22 STEM academies, which includes students from 44 school divisions; and 8 Health Science academies, which include students from 10 school divisions, are required to develop plans of study that include dual enrollment/articulation agreements with community colleges and/or universities.

Postsecondary

The VCCS and the Virginia Department of Education work collaboratively to enhance the progression of secondary students to postsecondary education in CTE programs through articulated Programs of Study to provide students with clear pathways to the careers of their choice. Both programs of study and dual enrollment courses are well established at all state community colleges and public high schools.

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?

No

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

Yes

Secondary

Participation by local divisions in state and national student competition is supported as appropriate.

Postsecondary

The state administrator for postsecondary Perkins programs is working with the individual community colleges to develop student support groups for non-traditional gender students to increase the participation and completion of underrepresented genders in CTE programs. Such support groups have been formed at three colleges in the last year and additional colleges are in planning stages.

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

All Aspects of Industry (AAI) – The VERSO system (above) integrates AAI into all of the high school curriculum frameworks and competency/task lists for CTE in Virginia. VERSO also provides teachers access to instructional resources for AAI.

Postsecondary

The VCCS has been providing leadership to the colleges to increase various types of experiential learning for CTE students. Mentoring relationships have been an emphasis this year. However, the colleges have numerous other means of providing students with greater understandings of business and industry through internships, cooperative education, shadowing, tours, guest instructors/speakers, etc.

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

Federal and State Labor Laws for Youth Work-Based Learning – Know the Rules is a resource, developed in collaboration with the University of Virginia Weldon Cooper for Public Service to compare federal and state labor laws for nonagricultural and agricultural occupations, parental exemption, and prohibited and hazardous occupations as they relate to youth work-based learning.

Postsecondary

The VCCS has been providing leadership to the colleges to increase various types of experiential learning for CTE students. Mentoring relationships have been an emphasis this year. However, the colleges have numerous other means of providing students with greater understandings of business and industry through internships, cooperative education, shadowing, tours, guest instructors/speakers, etc.

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

Career Cluster and Career Pathway Development (secondary and postsecondary effort) – With the assistance of the CTE Resource Center, the VDOE developed a set of career cluster posters, representing each of the 16 career clusters and featuring graduates of Virginia's CTE programs. These have been made available to all school divisions. Additionally, the graduates' photographs have been incorporated into the Resource Center's Website. During 2015-2016, approximately 465 sets of the career cluster posters have been distributed to school divisions.

The Virginia Education Wizard, a coalition of Virginia educational agencies, is supporting the continued development of the innovative online college and career planning tool (www.vawizard.org). The Wizard is available to every student in Virginia and provides career assessment results according to Career Clusters. Wizard version 5.0 allows students to create and store academic and career plans, as well as merge career pathways into those plans.

Postsecondary

See previous discussions in STEP 3: Part B.

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

Yes

Secondary

Entrepreneurship education is integrated into all CTE programs. Training and best practices sessions were provided during the program area summer conferences.

Postsecondary

No

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

Virginia Teachers for Tomorrow: This program introduces high school juniors and seniors to careers in education. In addition to the fundamental curriculum components, all students are required to participate in an internship outside the Virginia Teachers for Tomorrow classroom. The internship may involve the Pre-K through grade 12. During 2015-2016 school year, 1,848 students participated in the Virginia Teachers for Tomorrow program.

Educators Rising (formerly the Future Educators Association)—In 2015-2016 there were 1,213 members. This national leadership organization provides high school students opportunities to explore teaching as a career option. It helps students gain a realistic understanding of the nature of education and the role of the teacher.

New Teacher Institute – A week-long institute is held annually for new career and technical education teachers. The goal is to help highly qualified professionals transfer technical knowledge from workplace to classroom instruction. The institute is led by the University of Virginia professors and upon completion of the course requirements; teachers receive three graduate credits toward their Virginia teaching license. Licensure for teaching is provided by issuing a provisional teaching license that allows three years to complete the educational requirements for a permanent teaching license. As a result, these professionals require intense staff development to assist in the transition from industry professional to a licensed teacher. In 2015, 47 new teachers participated in the New Teacher Institute.

Postsecondary

No

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

Yes

Secondary

Through the Trailblazers project, staff of the UVa, Weldon Cooper Center, Demographics & Workforce Group assisted VDOE Office of Career and Technical Education Services and administrators in individual school divisions to use and interpret national, state, and regional occupational employment data for course and program planning and student advising.