



Consolidated Annual Report 2014

**Program Year
July 1, 2013 – June 30, 2014**

**Kentucky Department of Education
Office of Career and Technical Education**

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Executive Summary

This document contains the required annual report on the state-level activities conducted in Kentucky through the benefit of federal funding from the Carl D. Perkins Career and Technical Education Act of 2006. In addition to the state-level activities, a report on the achievement of career and technical education students is addressed, according to the requirements within the Act.

Section 121: State Administration

A. Sole State Agency and Governance Structure

In Kentucky, the Kentucky Board of Education (KBE) serves as the State Board for Career and Technical Education. The Kentucky Department of Education (KDE) administers secondary Carl D. Perkins funds. The Director of the Office of Career and Technical Education (OCTE), KDE, serves as Perkins State Director and provides oversight and coordination of all Perkins activities. OCTE also implements and monitors the secondary and postsecondary Perkins grants, provides technical assistance to secondary career and technical education programs, the Kentucky Community and Technical College System (KCTCS), and three regional universities in the state. The Kentucky Board of Education has delegated to the Kentucky Workforce Investment Board the state leadership activities referred to in 20 U.S.C. sec. 2344 to be conducted in accordance with the required and permissible uses of funds specified in the Carl D. Perkins Career and Technical Education Act of 2006 and subsequent amendments thereto. The maximum amount of funds allowed by 20 U.S.C. sec. 2322(a)(2) are reserved and made available for state leadership activities. The Office of Financial Management, KDE, prepares and submits the interim and final Financial Status Reports.

The Kentucky Office of Career and Technical Education (OCTE) is committed to improving the instructional quality of career and technical education programs throughout the Commonwealth. Our goal is to provide the leadership and guidance necessary to build and maintain relevant and rigorous career and technical education programs that meet the needs of business and industry. We work to assure all career and technical education programs continuously improve and meet the Perkins accountability performance measures. Programs are improved through the collection and analysis of data gained from a stringent program assessment process. Career and Technical Education programs in Kentucky are offered to students in middle and high schools, area technology centers, a virtual area technology center, community and technical colleges, adult and juvenile correctional facilities, the Kentucky School for the Deaf (KSD) and regional universities across the state. Input from industry, community leaders, students, parents and educators play a vital role in curriculum development and instructional improvement.

Section 124: Implementation of State Leadership Activities

A. REQUIRED USES OF FUNDS

(1) Conducting an Assessment of the Career and Technical Education Programs Funded Under Perkins IV

The Office of Career and Technical Education (OCTE) has managed program assessment for secondary career and technical education (CTE) programs since 2001. This process has raised the quality of career and technical education programs statewide. The stakeholders developed a process and a 21-standard document (later revised to 17 standards) by which to assess the CTE programs. The document is revised every two years to begin a new two-year cycle of assessment team visits. OCTE provided technical support for continuous improvement within the locally- and state-operated technical education programs. OCTE was accredited by AdvanceED-SACS-CASI with program assessment being used for quality assurance. The findings of the assessment teams are entered into a database and are: (1) shared with the schools for their use in developing program and school continuous improvement plans; (2) the major support for AdvanceEd/SACS accreditation; (3) used for the development of the OCTE district continuous improvement plan and (4) used to provide professional development for teachers and administrators. The Perkins accountability measures are a component of the assessment instrument.

The instrument used for program assessment has been developed with input from administrators, secondary and postsecondary teachers, and business and industry representatives to evaluate technical programs at the secondary

level in area technology centers and locally-controlled secondary programs within the high schools. The goal of the assessment project is to ensure that all technical programs operated by state and local school districts are offering students the same quality of program offerings, and ultimately, the same opportunities for employment and a seamless path to postsecondary education. The assessment document evaluates 17 standards and impacts over 500 programs.

Over 500 CTE programs in 94 secondary state-operated area technology centers and locally-operated technology centers were assessed during the most recent two-year evaluation cycle. Forty-three state- and locally-operated technical schools and departments were assessed during the 2013-2014 school year. Assessment teams included stakeholders from the Kentucky Community and Technical College System (KCTCS), Kentucky Department of Education (KDE), principals, teachers and a university educator. There was a decrease in the number of business and industry participants over previous years. During each assessment visit, programs are thoroughly reviewed and evaluated in each of the following areas: technical and academic curriculum, lesson planning, postsecondary links, program contributions to the community, follow-up and placement, classroom safety, involvement in student organizations, incorporation of technology in the classroom, work-based learning opportunities for students, Perkins performance measures results, teacher certification, and professional development.

Technical assistance was given to teachers, principals, and coordinators as visits were made. Training was provided throughout the school year and summer. A website has been developed (<http://www.kytech.ky.gov/programassessment.htm>) to house the assessment instrument and allow schools access to the instrument to conduct a self-evaluation at the end of the school year. The website also includes instructions, supporting documents, resources, and examples of documentation. The statewide school average for assessment team visits continues to increase. Data collected during team visits show programs continue to make improvement in meeting the 17 standards with an average of 3.72. This is an increase of 0.07 from the previous school year. This shows improvement; however, programs still need to work on improving to meet the program assessment standards. Improvements resulting from the assessment visits have included incorporating more writing into daily instruction, emphasizing related math embedded in the instructional content, and more participation in student organizations. Perkins performance measures are incorporated into the assessment instrument and this has helped instructors and administrators see the link between the federal and state evaluation criteria and make more effort to increase both.

KCTCS works with its colleges in analyzing their performance data, pinpointing areas of strength and weakness, and developing an improvement plan to identify and correct deficiencies. Assistance is provided to ensure programs have the support needed to implement new procedures or strategies to improve their performance. Evaluating the following criteria is part of this process:

- Program success based on performance indicators
- Professional development activities in which the teachers participated
- Updates in the curriculum based on business and industry needs
- Number of students placed in high skill, high wage, or high demand occupations

(2) Developing, Improving, or Expanding the Use of Technology in Career and Technical Education

Automotive Technology instructors in the Kentucky Tech System of Schools used the Today's Class/Melior Online Resource for the sixth time during the 2013-2014 school year. Sixty-three instructors signed up to take advantage of the service which was an increase of eight from the previous year. A total of 1,922 students were enrolled in the online classes (an increase of 349 from 2012-2013) and a total of 7,193 modules/classes were taken and passed by those students. The number of modules was an increase of 1,629 from the previous year.

The areas covered by the modules include Brakes, Electrical Systems, Suspension and Steering, Basic Engine Performance, Safety, Heating and Air Conditioning, Engine Repair, Manual Transmissions and Transaxles, and Automatic Transmissions and Transaxles. These resources include all of the basic concepts to provide a solid foundation for ensuing laboratory work and practice. The online material can be accessed by the student at school or home.

The Melior/Today's Class Online Curriculum Resource also includes the industry online end-of-program test in partnership with ASE/NATEF for automotive technology students, Lab/Task sheets in modules that are based on ASE/NATEF (industry) standards, pre-test and post-test measures, and online materials that present algebraic and physics related material. The ASE Student Certification Tests also are developed in partnership with Skills USA and AYES, which makes the tests even more relevant to the courses taught in the automotive curriculum.

In the fall of 2013, 364 students took these tests and 214 of them passed. Some of these students passed more than one area. In the spring of 2014, 624 students took the tests and 394 of them passed. Some of these students passed more than one area of the test.

Today's Class, through its career-based online automotive series, has elements that assist in meeting many of the requirements of the Perkins IV legislation, which is a major source of funding for our programs.

KCTCS formed partnerships between secondary and postsecondary educational agencies to provide access to education for Kentucky citizens who would not have the opportunity to learn if not for the convenience and accessibility of e-learning through the Kentucky Virtual University. KCTCS is continually planning and developing online courses to provide greater CTE educational opportunities to students. (3) Offering Professional Development Programs, Including 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.

OCTE conducted the following Technical Upgrade Training for secondary and postsecondary CTE teachers during the 2013-14 school year. The purpose of this training was to help teachers maintain current industry practices and technical skills to ensure their students are prepared for Career Ready Industry Certification assessments. The Technical Upgrade Training for 2013-14 included:

1. Automotive Collision Repair using Axalta; Dupont and 3M technologies: 7 teachers participated
2. Construction Technology Skills Upgrade: 25 teachers participated
3. Environmental and Natural Resources for the Agricultural Educator: 8 teachers participated
4. Automotive Gasoline Direct Injection and Computer Diagnostics: 33 teachers participated
5. Microsoft Office Specialist and IC-3 Certification Training: 25 teachers participated
6. Programmable Logic Controllers: 16 teachers participated
7. Torchmate Computer Numeric Control: 24 teachers participated
8. Welding Technology MIG and TIG processes: 30 teachers participated
9. Engaging Methods to Teach Animal Science in Agriculture: 8 teachers participated

(3) Offering Professional Development Programs, Including 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

The New Teacher Institute (NTI) is a joint effort with the state universities offering an approved teacher education-training program (certification) and OCTE. New teachers seeking an occupational-based certification participate in NTI in order to develop essential competencies in areas such as methods of teaching, working with special needs students, assessment techniques, group instruction, instructional media, classroom management, and lesson plan preparation in their first year of teaching. Participants also are required to prepare and present a lesson presentation that will be critiqued by participants. The initial five-day training is followed up three to six months later with a three-day workshop. The three-day workshop brings participants together with teacher educators and state department staff to share experiences and develop strategies in planning, managing, organizing and evaluating instruction and teaching techniques. This program is integrated into the teacher internship and field-based education programs offered through the universities in Kentucky. New teachers participating in NTI receive three hours of college credit upon successful completion of the workshops. Forty-two (42) new teachers participated in the New Teacher Institute Five-Day Workshop and thirty-five (35) participated in the Three-Day Follow-Up Workshop. The NTI program is continuously improving its curriculum and delivery system to incorporate new teacher standards that are research-based and reflective of best teacher practices in technical education.

The New Principal Orientation (formerly NPI – New Principal Institute) was designed to provide new area technology center principals overall information that focuses on major goals and objectives of a school principal. This orientation is conducted as needed throughout the year and is designed to provide the new principal with learning activities such as problem-solving, brain-storming, team work, time management, and communication skills. This year seven new principals attended the training.

The NPO provides specific information to support the new principal's growth as a professional person to continue improvement, learning and understanding of instructional improvement, Technical Education Database System (TEDS) in Kentucky, federal requirements including Perkins, management of a technical school, supervision, administration and budget information, rules, regulations and responsibilities, school and program issues, working with the local board of education, and working with business and industry/community relations.

This year, 12 Kentucky Tech Construction Industry teachers took advantage of a grant opportunity to attend Occupational Safety and Health Standards (OSHA) training at Eastern Kentucky University. The workshop was three days in length and allowed these instructors to obtain certification or become recertified in Occupational Safety Standards. This is a valuable resource that is used as teachers provide instruction on the importance of safety training in the classroom.

Each eligible university received a Perkins Leadership Grant to enable educators to attend state and national professional development opportunities. These educators attended conferences sponsored by organizations such as the Association for Career and Technical Education, National Association for Career and Technical Information, Association for International Technology Engineering Education Association, Association for Supervision and Curriculum Development, National Association for Young Children, and National Future Farmers of America.

Western Kentucky University sponsored the Teacher Leadership Academy. This academy was based on the "Teacher Leader Model Standards" put out by the Teacher Leadership Exploratory Consortium. The objectives for the project included: excellence in the classroom; becoming a better leader in the school; and becoming an advocate for CTE in the community.

KCTCS also provided a variety of initiatives geared toward technical/program faculty development including a Master Teacher Seminar and the New Horizons Conference on Teaching and Learning. The Master Teacher Seminar is a hands-on, interactive program that supports development of improved and enhanced instructional abilities. The New Horizons Conference provided interactive presentations and sessions on a wide variety of topics relevant to instruction and technical programs.

(4) Providing Support for Career and Technical Education Programs That Improve the Academic and Career and Technical Skills of Students through the Integration of Academics with Career and Technical Education

The KY Tech System piloted Technology Centers That Work (TCTW) with two state-operated area technology centers. The initiative provided project-based learning professional development for both staffs focused around the integration of academics into CTE content. The professional development activities were followed with coaching sessions where project-based learning experts provided one-on-one assistance to CTE teachers.

Kentucky Tech principals were trained in the use of the professional growth and effectiveness professional learning. This system will help principals work with their teachers to improve both the academic and career and technical skills of students.

OCTE, along with SREB, developed curriculum to expand a career pathway in informatics. This curriculum developed best practices for teaching concepts to students including project-based learning. The training that was part of the curriculum development helped instructors to have a better understanding of how to integrate academics into the curriculum.

(5) Providing Preparation for Nontraditional Fields in Current and Emerging Professions, and Other Activities that Expose Students, Including Special Populations, to High Skill, High Wage Occupations

The equity coordinator for OCTE is providing support and guidance to secondary and postsecondary schools through workshops, technical assistance, the website and distribution of resource materials. Kentucky is an active member of the National Alliance for Partnerships in Equity (NAPE). Kentucky relies on the organization's distribution of current resource materials and research on a regular basis through e-mails, newsletters, workshops and conferences. Kentucky participates in the NAPE annual conference and uses the research and information to develop equity workshops and activities, such as grants for career camps for nontraditional programs, to assist principals and teachers in Kentucky. Since the 1996 legislation, increasing the participation of students enrolled in programs preparing students for nontraditional employment has been a statewide goal.

The non-traditional funds were allocated to seven grants for nontraditional career camps to be held before June 30, 2014. The grants were awarded to Bullitt County Schools, Clay County Schools, Fayette County Schools, Glasgow Independent Schools, Grayson County Schools, Knox County Schools and Scott County Schools. Approximately 700 students were served.

KCTCS held a series of camps for students to encourage them to enter a career pathway for high skill, high wage occupations. The goal of the program is to increase the awareness of technical careers and the relevance of educational career pathways to youth ages 12 to 15. The programs introduced middle and high school students to technical career pathways and the options of earning college credit in high school before transitioning to a KCTCS college to earn an associate degree. Over 1,000 students participated in the camps.

(6) Supporting Partnerships to Enable Students to Achieve State Academic Standards and Career and Technical Skills or Complete Career and Technical Programs of Study

CTE programs within Kentucky are required to have an advisory committee made up of business and industry representatives to provide input for program and instructional improvement. The committee meets at least once each year. The contacts provided through advisory committees help in developing community partnerships that provide valuable resources to teachers and students, especially mentoring, cooperative work experience opportunities, and job placement. In addition to business and industry partnerships at the local and state level, partnerships among and between levels of educational institutions are ongoing. Secondary CTE educators work with postsecondary partners at the community and technical college level and university level in developing curriculum, assessments, and articulation agreements. Kentucky Tech encourages its schools to make a greater effort to become involved with business and industry, particularly in curriculum and assessment development.

The president (or designee) of KCTCS continually meets with industry leaders to determine their needs. Information from these meetings is used by curriculum committees in the review of current curriculum and the development of new programs. Industry leaders were used in the KCTCS Delphi Studies project to determine if tasks were used in industry and how frequently they were used. Postsecondary schools are encouraged to work closely with secondary partners to provide a link for their students into postsecondary education. Fifteen CTE courses/curricula were expanded, revised, or developed consistent with the alignment of the KCTCS board policy, needs of business and industry and/or accrediting/regulatory agencies. Priority was given to the following pathways: agriculture, business, computer and information technologies, biomedical technology, culinary arts, aviation maintenance technology, and nursing.

(7) Serving Individuals in State Institutions

The Kentucky Department of Corrections Education Branch provides educational opportunities for inmates housed within the adult public correctional facilities. Ten technical certificate programs at 12 correctional facilities are offered tuition free. Programs offered include Electrical Engineering, Horticulture, Air Conditioning, Carpentry, Masonry, Small Engine Repair, Automotive Technology, Business, Auto Body, and Welding.

Perkins funding was utilized to provide new software, equipment and instructional materials to meet curriculum revisions and industry standards. Updating of equipment has continued to be a priority during the past year due to curriculum revisions. Funding also was used to provide professional development opportunities to faculty. Faculty continued to work on the implementation of collaborative programs between technical and academic departments to assist students in overcoming educational barriers to ensure they have the opportunity to reach the highest level of educational opportunities available. The correctional education program continually strives to meet the needs of its students through continued curriculum development, state-of-the-art equipment, and adequate career counseling services.

The ten Youth Development Centers primarily used their Perkins funding for professional development activities and training among the sixteen technical instructors. This type of training allows instructors to remain current with industry trends and teaching methods and impacts approximately 777 students. It also provides them an opportunity to interact with other teachers in the same type of classroom setting and allows them to share best practices.

(8) Providing Support for Programs for Special Populations That Lead to High Skill, High Wage, and High Demand Occupations

During the year, programs, services, and activities have been incorporated in CTE programs for individuals with disabilities, those from economically disadvantaged families, individuals preparing for nontraditional training and employment, and those with limited English proficiency. Supportive services included: readers, tutors, special needs coordinators, disability coordinators, and liaison personnel.

Issues relating to students with special needs were presented at each of the NTI workshops. The presentation was made to introduce the concept of special populations to the new teachers. This presentation included a section on IDEA, types of special populations, and the types of accommodations that might be used to help students with special needs. During the three-day follow-up sessions, new teachers were presented with scenarios to help the new teachers become more familiar with what students with special needs might look like as well as what accommodations might be implemented to assist these students.

The Kentucky School for the Deaf (KSD) is a residential facility for students with hearing impairments and also serves some hearing students from surrounding school districts. The majority of the Perkins funds received were used for professional development for instructors. Funding also was used to expand curriculum development with a focus on integrated academic and technical activities.

OCTE provided technical assistance to educational leaders regarding programs, services and activities for special populations. Technical assistance and professional development focused on strategies for helping students from special populations succeed in career and technical education programs. Staff participated in a regional fair for students with disabilities. Major emphasis at each fair was on transition and employability skills. Participants in each fair included school personnel, counselors, related agencies, and postsecondary education representatives. The annual Career and Technical Education conference provided a variety of opportunities for personnel to update strategies on working with special populations. Special emphasis was given to areas such as: collaborating technology for special-needs students; accountability through program reviews; the use of Individual Learning Plans; working with students in nontraditional programs; and accommodations for students beyond high school.

The special needs liaison program has been established in some of both state- and locally-operated technology centers. During the 2013-2014 school year, OCTE staff conducted four regional workshops to provide information to principals and special education cooperative coordinators regarding the advantages and feasibility of this program. Attendees also reviewed the present Special Needs Liaison Guidelines and made recommended changes. Approximately 45 people attended these workshops.

KCTCS employees work with students who have physical or other disabilities. When students request accommodations, the counselor and the student discuss what is needed and the counselor works with appropriate teachers to see that the student gets the help needed. KCTCS provided services to special populations at all colleges. Low-income students are provided with the opportunity to apply for financial aid and receive Pell Grants, CAP Grants and other aid if they meet the qualifications.

Students with disabilities are provided reasonable accommodations at all colleges. Each district has an employee who is designated to work with students with disabilities. If they meet the ADA guidelines, they are provided with instructional accommodations, adaptive equipment, and assistive technology as needed. The schools also meet the requirements for physical access to buildings or modifications are made. Many programs and classes are provided for students who are not academically prepared for college level classes. All new students are required to take a placement test and must take developmental classes if the scores indicate they are needed. This ensures that they are ready for the challenges of college level classes. Many schools already meet the needs of English as a Second Language (ESL) students and others are implementing ESL classes as the community population changes. Postsecondary and secondary educators are always striving to improve their services to meet new needs of the students.

A statewide organization is dedicated to improving CTE access and training to students with special needs. The Kentucky Association for Career and Technical Education – Special Needs Personnel (KACTE – SNP) organizes sessions at the annual summer conference to provide updated information on working with different special needs populations, showcases best practices, and provides opportunities for networking with others who work with special needs students. Information also is disseminated via a newsletter and a website. The association board is scheduled to meet quarterly throughout the year. The association awards two \$500 scholarships to students with special needs, one for a secondary student transitioning to a postsecondary career and technical education program and one for a student already enrolled in postsecondary career and technical education.

During the past twelve months, both the Kentucky Department of Education and the Office of Career and Technical Education conducted civil rights site visits. On-site visits were used as monitoring tools for schools receiving Perkins funding. Based on data (gender, sex, disability enrollments) from the Technical Education Database System (TEDS), on-site civil rights visits were conducted at schools that had a high disproportionate number in specified criteria of student populations and enrollments. A minimum of seven on-site visits were conducted by the Kentucky Department of Education and two visits were conducted by the Office of Career and Technical Education. These visits are based on a certain minimum percentage established by Office for Civil Rights.

(9) Offering Technical Assistance for Eligible Recipients

Technical assistance is available on an ongoing basis. Consultants and managers provide workshops as well as on-site assistance for instructors and administrators for curriculum development, assessment development and instructional improvement. The Data and Return on Investments Branch provides information on the KY TECH website for Perkins-related issues, sends informational e-mails and correspondence and provides workshops and on-site assistance for a variety of issues. Assistance was provided to schools to assist them in preparing the local funding application, interpreting accountability reports, and preparing local plans for improvement. A large amount of support is provided for the Technical Education Database System (TEDS), Kentucky's data collection system for federal reporting. During the 2013-2014 school year, technical assistance was provided to 277 high schools, middle schools and locally-operated area technology centers, 53 state-operated area technology centers, and 16 community and technical colleges with 67 campuses and six universities. Beginner and update training sessions were conducted for secondary and postsecondary staff.

Due to continual advancements and changes in the realms of technology, curriculum meetings have been held in the Construction, Information Technology and Manufacturing programs. The curriculum committees include representatives from all regions of the Kentucky Tech System with approximately five to six members at each meeting. As a result of these meetings, changes were made to tasks, courses and pathways to meet the challenges faced in each program area. Changes and upgrades to the program of studies have been made in such a way as to provide a seamless transition while mirroring the changes within KCTCS.

The continual need to create up-to-date and relevant lesson plans in each career cluster and each individual program within the Kentucky Tech educational system continues to be a priority for the consultants. Lesson plan writing sessions were completed on an individual basis this year in the Health Science program. Lesson plans reflecting the needs of business, industry, and postsecondary educational institutions in Kentucky were created and are now being used by Kentucky Tech instructors across the state. This information has become a valuable resource for new teachers as well as those who have been in the classroom for several years.

B. Permissible Activities (Section 124)

(1) Improving Career Guidance and Academic Counseling Programs

State level funds were not used for Improving Career Guidance and Academic Counseling Programs in 2013-14. However, many school districts used their local Perkins funds to provide career guidance and career coaches for students.

(2) Establishing Agreements, Including Articulation Agreements, to Provide Postsecondary Education and Training Opportunities for Students

Articulation agreements for all technical programs offered in KY Tech secondary area technology centers are in place and are reviewed annually. Discussions are ongoing with two-year technical colleges and eight regional universities within the state, and with selected private and technical colleges in Kentucky and the neighboring states of Ohio, Indiana, Illinois, and Tennessee. Additional work has been completed to support growth, sustainability and equal access to CTE dual credit coursework in a recent revision of the Statewide Dual Credit Policy. The goal is to provide Kentucky students the opportunity for a seamless transfer of credits from the secondary to postsecondary level, encouraging a better-educated workforce and potential economic development opportunities for our state.

(3) Supporting Initiatives to Facilitate the Transition of Sub-Baccalaureate Career and Technical Education Students into Baccalaureate Programs

The 16 KCTCS campuses work closely with regional 4-year institutions to ensure that all students have viable pathways to bachelor's degrees. KCTCS programs include pathways with stackable credentials – certificates that build into diplomas and diplomas into associate degrees. Additionally, KCTCS has system-wide transfer agreements with several public regional universities and many private 4-year institutions for technical programs. The completer degree programs at Morehead State University and Western Kentucky University are prime examples of degree programs that allow students from multiple technical program areas to complete degrees with additional general education and management courses that expand employment opportunities for CTE students.

CTE secondary-postsecondary dual credit programs are aligned to provide secondary students with accelerated, low-cost access to postsecondary credentials.

(4) Supporting Career and Technical Student Organizations

In Kentucky, Career and Technical Student Organizations (CTSOs) are co-curricular with the program areas. Each program area aligns with a CTSO where students are taught leadership skills and community support. Students are encouraged to participate in regional, state, and national conferences. Students from Career and Technical Student Organizations (DECA, FBLA, FCCLA, FEA, FFA, HOSA, PBL, Skills USA-VICA, TSA) represented Kentucky at state and national leadership conferences. Through the leadership training opportunities and the competitions, technical skills taught in the classroom are enhanced. Advisors supervised students at conferences and attended updates for conference activities and award programs, run competitive events, and participate in conference forums. Teachers who sponsor the student organizations participate in a leadership development seminar each year. The purpose of the seminar is to update the teachers on new competitive events and guidelines, and to enable them to make student organizations an integral part of their program. As a result, students and teachers became more aware of career and technical education initiatives. The networking opportunities provided through participation in conference activities assisted advisors in establishing resource contacts with fellow technical educators.

(5) Supporting Career and Technical Education Programs That Offer Experience in, and Understanding of, All Aspects of an Industry

Kentucky has established the Tech Ready Apprentices for Careers in Kentucky (TRACK) program. The TRACK program is a partnership between OCTE and the Kentucky Labor Cabinet to provide pre-apprenticeship opportunities to secondary students. This is an industry driven program to create a pipeline for students to enter postsecondary apprenticeship training. The program was developed to meet the needs of the manufacturing industry in the state.

In fall 2013, a pilot program was developed for thirteen high school technology centers to focus on manufacturing. The employer chose from the manufacturing course offerings at the school to design the program. A minimum of 4 courses were required, with one of the courses being a cooperative education placement. Upon successful completion, the student was awarded an industry certification by the employer through the Labor Cabinet and all on-the-job hours worked was counted toward the apprenticeship. The certification also counted toward the local school district's college- and career-ready accountability index.

(6) Supporting Family and Consumer Sciences Programs

Family and Consumer Science (FCS) programs, offered in both comprehensive high schools and area career and technology centers, receive Carl D. Perkins funds to help with program improvement. Kentucky currently recognizes six career pathways in FCS: Consumer & Family Management, Early Childhood Education, Fundamentals of Teaching, Culinary and Food Services, Hospitality Services, Fashion & Interior Design. This year Kentucky designed a new pathway called Food Science & Dietetics. Kentucky's state report for the AAFCS Pre-PAC assessments indicated that our Kentucky FCS students performed above the national average in 4 out of 5 tested areas.

(7) Support to improve or develop new career and technical education courses and initiatives, including career clusters, career academies, and distance education that prepares individuals academically and technically for high skill, high wage or high demand occupations

Kentucky has developed several new pathways: Informatics, Energy Management, Energy Technician, and Food Science & Dietetics. Groups of business and industry representatives and teachers were brought together to develop course outlines, develop standards and create curriculum. Each pathway has a sequence of four courses. Teacher training has been conducted and pilots sites have been identified for implementation.

(8) Provide career and technical education programs for adults and school dropouts to complete their secondary school education in coordination to the extent practicable, with activities authorized under the Adult Education and Family Literacy Act

Kentucky Adult Education (KYAE) launched the Employability Skills Pilot in January 2014 by convening teams of directors and instructors from eleven counties. Over the course of the next 6 months, these teams virtually participated in weekly discussion boards and monthly face-to-face meetings focused on the integration of entry-level employability skills with academic instruction. Supported by coaching provided by a curriculum developer, each county developed no less than 10 lesson plans infused with opportunities for students to learn and develop confidence in using the skills that employers seek in job candidates. The pilot counties participated in a workshop to introduce Focus Career™, which assists students to build a detailed resume, find jobs that match with their skills and abilities, sign up for job alerts and explore paths for related careers. In addition to the lessons plans developed by pilot participants, KYAE also created a multidisciplinary instructional unit which incorporated the functionality of Focus Career. KYAE is concurrently developing a repository where programs can share and access standards-based, high quality lessons which have been contextualized for entry-level employment.

(9) Developing Valid and Reliable Assessments of Technical Skills

Through membership in the Career and Technical Education Consortium of States (CTECS), Kentucky Department of Education (KDE) College and Career Readiness has worked to complete activities outlined in the CTECS grant. This project served to enhance the Assessment project as well as benefit CTE programs statewide. Through new development and implementation of industry recognized standards, programs are better equipped to evaluate occupational specific technical and academic skill attainment. The funds for fiscal year 2013-14 have been used to accomplish the following activities: develop an online testing system for the implementation and administration of the 2013-2014 Kentucky Occupational Skills Standards Assessment (KOSSA); provide data analysis and technical assistance; update building and management of assessment item banks; correspond with assessment coordinators; provide direction and guidance in the improvement, expansion and development of occupational specific technical and academic skill standards and assessments; participate in a forum through which states work collaboratively in sharing resources and solving common problems related to standards and assessments development and implementation; plan, and coordinate workshops geared toward accelerated growth our standards and assessments

particularly in the areas of computer programming, networking, web design, and information support and services; coordinate the administration and use of assessment results for program improvement through professional development at the CTE Summer Conference; and investigate and pilot an online system for assessment.

KCTCS is completing a multi-year project to align technical program content to business and industry standards and identify an end-of-program assessment that measures a student's knowledge of program competencies that meet business and industry standards. The project is comprised of three phases: DACUM, GAP/Curriculum alignment, and assessment development or selection. The assessment will be used to measure student attainment of career and technical skill proficiencies and program content, pedagogy, and student remediation. Nine technical education programs participated in the project and developed an occupational needs analysis, aligned their program to business and industry standards and researched the best option for end-of-program student assessment that meets the needs of business and industry.

(10) Developing or Enhancing Data Systems to Collect and Analyze Data on Secondary or Postsecondary Academic and Employment Outcomes

Teachers and administrators are encouraged to utilize data collected through the Technical Education Data System (TEDS) to impact instructional improvement within the classroom. Improvements continue to be made to the system which became operational in the year 2000 as a requirement of Perkins III. Each school is responsible for inputting student data for their programs, running summary reports, and utilizing the data for program improvement. The intranet software is becoming more user-friendly as modifications are made yearly. User screens and summary reports were modified to make them more user-friendly. During 2013-14 an import and rollover program was piloted for ATCs to eliminate the need for institutions to enter student data into TEDS that had already been entered into a similar system, and programming assures accurate calculations in summary reports.

New data fields are added as needed, such as industry certifications earned and end-of-year program assessments. Data entry screens allow the user to enter the same type of data for multiple students and new reports are identified and made available to schools each year to ensure they are collecting current data for Perkins accountability reporting and program improvement. In-service sessions were held throughout the year to train and retrain individuals to input data into TEDS. Approximately 200 school staff attended the training sessions including secretaries, principals, teachers and counselors. In-service sessions are held as needed to train and retrain individuals to input data into TEDS. A CTE summer program is held each year in July and approximately 250 school staff attended sessions offered on TEDS and Perkins during the program. On-site workshops are held to teach teachers how to utilize information on the reports for program improvement. Statewide and school summary reports are routinely run at the state level to pinpoint schools not entering their data or to identify schools and programs that are showing weakness in meeting their accountability goals. Schools are then contacted and assistance provided. Data audits are conducted routinely to identify problem areas and efforts are ongoing to assist school personnel in accurately coding and entering information so that data more accurately reflects the success of the school.

(11) Improving 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

The New Teacher Institute (NTI) is a joint effort with the state universities offering an approved teacher education training program (certification) and the Office of Career and Technical Education. New technical teachers employed by the Kentucky Department of Education, Office of Career and Technical Education, Job Corps training centers, and high school (non-degree) instructors participate in NTI in order to develop essential competencies in areas such as methods of teaching, working with special needs students, assessment techniques, group instruction, instructional media, classroom management, and lesson plan preparation in their first year of teaching. Participants also are required to prepare and present a lesson presentation that will be critiqued by participants. The initial five-day training is followed up three to six months later with a three-day workshop. The three-day workshop brings participants together with teacher educators and state department staff to share experiences and develop strategies in planning, managing, organizing and evaluating instruction and teaching techniques. This program is integrated into the teacher internship and field-based education programs offered through the universities in Kentucky. New teachers participating in NTI receive three hours of college credit upon successful completion of the

workshops. Forty-two (42) new teachers participated in the New Teacher Institute Five-Day Workshop and thirty-five (35) participated in the Three-Day Follow-Up Workshop. The NTI program is continuously improving its curriculum and delivery system to incorporate new teacher standards that are research-based and reflective of best teacher practices in technical education.

The Education Professional Standards Board provides support to CTE instructors through the Kentucky Teacher Internship Program. This program provides teacher mentoring consisting of 40 hours of out-of-class time for consultation between a trained resource teacher and the intern. The resource teacher provides an additional 20 hours of in-class observation and guidance during the school day. A teacher educator, assigned by a university, provides an external review of the intern's performance as well as providing additional support and resources to the intern. The three-member committee assigned to the intern (principal/resource teacher/teacher educator) assists the CTE intern in pursuit of meeting the Kentucky Teaching Standards during the year-long internship. The committee members observe the intern a total of nine times during the year. To become successful with the Kentucky Teacher Standards, the intern must demonstrate the effects of teaching based on positive student achievement outcomes.

2. Progress in Developing and Implementing Technical Skills Assessments

A performance-based training and assessment system known as the Skill Standards Certification System was initiated in 1999 for secondary students enrolled in technical education. The statewide implementation of the skill standards project has encouraged all teachers to ensure that they are teaching current curriculum that is aligned to the industry endorsed skill standards by occupational area. Aligning the curriculum is helping to ensure that students statewide are receiving high-level technical training in their chosen career area in addition to measuring academic and employability skills. The reporting of assessment results at the state, school and student level has been very beneficial to career and technical education teachers as they work to align their curriculum and evaluate student performance based on the Kentucky Occupational Skills Standards Assessment (KOSSA). This endeavor is helping to shape the direction of career and technical education in our state. The Skill Standards Assessment implementation has placed a heavy focus on the need for all schools to accurately and consistently report student data at the secondary level. This system is helping to close the gap and guide districts in more thorough and accurate reporting. The skill standards assessment has served as one means of reviewing the performance level of secondary career and technical education programs in Kentucky.

The Skill Standards assessments were developed by the Kentucky Office of Career and Technical Education with input from business and industry representatives and teachers. All senior preparatory students who are enrolled in technical programs at the secondary level in local high schools and area technology centers take the appropriate test for the career area in which they are enrolled each spring. When available, an approved industry certification may be taken by the student instead. Participation in the assessment process allows the student to see the skill level they have obtained in their class work in the technical field he or she is pursuing. In addition, the test results serve as a credential for students to provide to future employers. The KOSSA system is serving as a meaningful tool at the school, district, and state level as a means for program evaluation and improvement in career and technical education in Kentucky and has recently been approved as a component of Kentucky's College and Career Readiness Accountability System.

Program areas for which the Kentucky Occupational Skill Standards Assessment (KOSSA) are available include Business Education; Marketing Education; Family Consumer Science; Manufacturing; Agriculture Education; Allied Health; Communications; Construction; Transportation; and Engineering and Technology. Currently, all program areas have one or more technical assessments available and 24,413 students took a technical assessment in 2014. There are a total of 26 assessments currently available. Development of standards and assessments in additional areas is underway with planned implementation in 2014.

Many of the career pathways also accept National Industry Certifications as the final program assessment. These certifications are designed and recognized by the industry they represent. As previously stated, a student may take an industry certification in place of the KOSSA or along with a KOSSA. Kentucky awarded 9,451 industry certifications in 2013-14.

3. Implementation of State Program Improvement Plans (Section 123)

Secondary Accountability Data for 2013-2014			
Measure	State Goal	State Measure	Number of Schools NOT Meeting 90% of Goal
1S1 – Academic Attainment Reading: (Senior preparatory students scoring proficient or above on EOC assessment in English II)	29.69%	52.26%	19
1S2 – Academic Attainment Math: (Senior preparatory students scoring proficient or above on EOC assessment in Algebra II)	29.60%	33.29%	116
2S1 – Technical Skill Attainment: (Senior preparatory students passing a KOSSA or and Industry Certification)	65.00%	65.01%	99
3S1 – School Completion: (Students completing high school including alternative certifications and GEDs)	97.00%	99.32%	4
4S1 – Graduation Rates: (Students receiving a high school diploma)	95.00%	98.47%	6
5S1 – Placement: (Previous year completers who have had a successful placement in postsecondary education, employment or the military)	90.00%	89.41%	50
6S1 – Nontraditional Participation: (Students of a gender enrolled in a program that employs 25% or less of that gender)	37.00%	36.89%	113
6S2 – Nontraditional Completion: (Students of a gender that complete a program that employs 25% or less of that gender)	21.50%	19.82%	152
Postsecondary Accountability Data for 2013-2014			
Measure	State Goal	State Measure	Number of Schools NOT Meeting 90% of Goal
1P1 – Technical Skill Attainment: (Preparatory students that passed a program assessment test and a completer that received or was eligible to receive a credential)	88.00%	47.00%	13
2P1 – Credential/Certificate/Degree: (Students who completed the pathway and received and a completer that received or was eligible to receive a credential)	90.00%	47.00%	15

Postsecondary Accountability Data for 2013-2014			
Measure	State Goal	State Measure	Number of Schools NOT Meeting 90% of Goal
3P1 – Student Retention or Transfer: (A preparatory that was retained in the pathway or transferred to a baccalaureate degree program)	95.00%	65.24%	17
4P1 – Student Placement: (Previous year completers who graduated or were eligible to graduate that have had a successful placement in employment or the military)	68.00%	68.48%	8
5P1 – Nontraditional Participation: (Students of a gender enrolled in a program that employs 25% or less of that gender)	22.00%	24.64%	13
5P2 – Nontraditional Completion: (Students of a gender that complete a program that employs 25% or less of that gender)	13.00%	8.28%	13

Kentucky met the federal requirements for the secondary accountability measures by exceeding the 90% adjusted level of performance on each indicator. Kentucky didn't meet the federal requirements for four of the six postsecondary accountability measures due to a change in reporting standards for the KCTCS data. OCTE is working with KCTCS to develop goals to ensure that that performance measures will increase for the 2014-2015 reporting cycle.

With the increase in secondary performance measures, the success of the schools can be attributed to several collaborative efforts with business, industry and other educational institutions. Curriculum updates, increased number of work-based learning activities offered to students, implementation of skill standard assessments, increased participation by schools in nationally recognized programs such as High Schools that Work, and the availability of numerous workshops assisted teachers and school administrators to meet the 2013-2014 performance indicators. Trainings and on-site technical assistance were provided throughout the year to ensure that student data was entered accurately. The data system used in the state can be accessed at any time by school administrators and summary reports created. This allows staff to see at any point in time how each program in the school is performing, and if a program is not meeting a performance level, can target that program for assistance or additional effort on the part of students, instructors or administrators.

The total number of eligible recipients who did not meet at least 90 percent of the agreed upon adjusted level of performance will be required to implement a local program improvement plan for the succeeding program year.

Each school receiving Perkins funds has the capability to generate Perkins IV accountability reports by school and by program using the Technical Education Database System (TEDS). School principals and Perkins coordinators are requested to provide accountability reports to their teachers so strengths and weaknesses in each school can be identified and a plan for improvement developed and implemented for any Perkins accountability measure not met. In the plan for improvement, the school must identify specific strategies that will be implemented, the timeline for implementation, the program to be impacted, and the person responsible for implementing the strategies. The school principal or Perkins coordinator in each school will monitor progress on the program improvement plan throughout the school year. In addition, site visits will be made by central office staff, data audits conducted, and instructional plans will be reviewed as needed. Consistent non-improvement may result in funding being reduced or eliminated to the program or school. On-site technical assistance sessions with state program area consultants are available to assist eligible recipients in planning program improvements.

Data will continue to be analyzed routinely by school and program to determine specific program areas or student populations in need of assistance. Monitoring and technical assistance visits are conducted periodically to verify information entered into the system and provide training to assure faculty and administration understand the Perkins accountability and the TEDS system. Efforts will continue to evaluate the strategies used in the schools to determine if instructional techniques are affecting student performance. Reporting procedures will be evaluated to assure that all data is being reported and that it is reported accurately. Strategies will be reviewed and changes implemented to assure continued increases in performance for all accountability goals for next year.

CONCLUSION

During the past year, Perkins funds have provided professional development opportunities for instructors and administrators and purchased state-of-the-art equipment in classrooms and laboratories. The administration has emphasized the importance of integrated academics and technical skills. Special projects have been developed to assist instructors in developing lesson plans that integrate math, science and writing into their curriculum. Materials have been provided to all schools to utilize for nontraditional participation and completion. Professional development opportunities were expanded during the year, especially those that allowed instructors to upgrade their knowledge and skills on equipment being used in business and industry. Opportunities also were provided for instructors to work with their academic colleagues to develop integrated learning projects to improve their knowledge in the use of technology in the classroom, to learn about individual learning styles, and to become more effective in classroom management skills. The secondary program assessment process and assistance from state staff in curriculum, lesson plan database implementation, and instructional methodologies all contributed to student success. At the postsecondary level, equipment purchases have increased in all schools allowing students to be trained on the latest technology. Improved technology has increased student interest in class participation and increased their likelihood of being hired in business and industry upon completion of the program.

Professional development opportunities will continue to be expanded to provide instructors with knowledge about the latest equipment, software, and instructional strategies. Workshops and trainings will continue to be provided to assist personnel at secondary and postsecondary institutions with special populations and gender equity initiatives. Equipment will continue to be updated to meet business and industry standards. Integration of technical and academic programs will continue to be encouraged with assistance provided in developing integrated projects. Partnerships will continue to be formed between educational institutions, state agencies, business and industry and the community in order to ensure that all students in our state receive a technical education of the highest quality available.

APPENDIX 1: Disaggregated Secondary Performance Data								
	1S1	1S2	2S1	3S1	4S1	5S1	6S1	6S2
	READ	MATH	TECH	COMP	GRAD	PLACE	NTPART	NTCOMP
STATE GOAL	29.69%	29.6%	65%	97%	95%	90%	37%	21.5%
Grand Total	52%	33%	65%	99%	98%	89%	37%	19%
GENDER								
Female	61%	33%	66%	99%	99%	90%	41%	24%
Male	45%	33%	64%	99%	98%	89%	33%	16%
RACE/ETHNICITY (1997 Revised Standards)								
American Indian or Alaskan Native	35%	20%	57%	96%	96%	88%	48%	33%
Asian	59%	55%	62%	100%	99%	96%	44%	17%
Black or African American	38%	23%	51%	99%	99%	95%	40%	24%
Hispanic/Latino	45%	30%	65%	100%	99%	92%	38%	21%
Native Hawaiian or Other Pacific Islander	50%	43%	83%	100%	100%	92%	27%	0%
Two or More Races	44%	27%	63%	99%	99%	93%	39%	19%
Unknown	42%	32%	63%	100%	100%	98%	20%	25%
White	54%	34%	66%	99%	98%	89%	36%	20%
SPECIAL POPULATIONS AND OTHER STUDENT CATEGORIES								
Individuals With Disabilities (ADA)	17%	18%	53%	99%	98%	80%	37%	14%
Economically Disadvantaged	44%	27%	61%	99%	98%	88%	38%	20%
Single Parents	32%	21%	66%	97%	93%	76%	20%	15%
Displaced Homemakers	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Limited English Proficient	3%	23%	32%	99%	98%	94%	38%	18%
Nontraditional Enrollees	57%	35%	59%	99%	99%	92%	N/A	N/A

APPENDIX 2: Disaggregated Postsecondary Performance Data						
	1P1	2P1	3P1	4P1	5P1	5P2
	TECH SKILL	CRED, CERT, DEGREE	RETAIN TRANSFER	PLACEMENT	NT PART	NT COMP
STATE GOAL	88.00%	90.00%	95.00%	62.00%	22.00%	13.00%
Grand Total	47.00%	47.00%	65.24%	68.48%	24.64%	8.28%
GENDER						
Male	41.53%	41.53%	62.08%	71.08%	14.88%	6.72%
Female	51.79%	51.79%	68.06%	66.89%	34.06%	9.71%
RACE/ETHNICITY (1997 Revised Standards)						
American Indian or Alaskan Native	45.00%	45.00%	56.00%	30.00%	27.35%	1.61%
Asian	48.72%	48.72%	65.81%	74.07%	28.84%	6.29%
Black or African American	28.00%	28.00%	52.72%	56.67%	27.16%	5.38%
Hispanic/Latino	42.72%	42.00%	64.15%	72.73%	29.97%	11.82%
Native Hawaiian or Other Pacific Islander	42.86%	42.86%	50.00%	100.00%	33.82%	8.33%
White	50.84%	50.84%	66.24%	70.54%	23.92%	8.28%
Two or More Races	24.69%	24.69%	43.24%	80.95%	25.77%	8.65%
Unknown	54.11%	54.11%	86.90%	40.46%	23.92%	8.86%
SPECIAL POPULATIONS AND OTHER STUDENT CATEGORIES						
Individuals With Disabilities (ADA)	43.75%	43.75%	57.37%	67.52%	26.22%	8.12%
Economically Disadvantaged	55.35%	55.35%	74.19* %	65.63%	25.58%	9.73%
Single Parents	55.21%	55.21%	60.32%	82.26%	30.72%	13.69%
Displaced Homemakers	61.54%	61.54%	37.50%	100.00%	11.76%	0.00%
Limited English Proficient	85.71%	85.71%	66.67%	100.00%	26.87%	28.57%
Nontraditional Enrollees	41.98%	41.98%	63.88%	65.08%	100.00%	42.89%

2P1 DISAGGREGATE INDICATORS		4P1 DISAGGREGATE INDICATORS	
Credential	2	Apprenticeship	11
Certificate	9,799	Employment	2,024
Degree	4,038	Military	6

APPENDIX 3: Disaggregated Enrollment Data

TABLE 1: ENROLLMENT BY PROGRAM AREA

	SECONDARY		POSTSECONDARY	
	Male	Female	Male	Female
Agriculture, Food & Natural Resources	2,686	2,074	148	108
Architecture & Construction	1,556	128	1,668	71
Arts, A/V Technology & Communications	359	363	101	122
Business Management & Administration	2,843	2,636	840	2,986
Government & Public Administration	0	0	9	4
Health Science	586	3,028	1,059	5,987
Hospitality & Tourism	0	0	110	189
Human Services	782	3,901	121	1,694
Information Technology	1,147	322	1,071	266
Law, Public Safety & Security	1,951	826	638	521
Manufacturing	2,165	158	2,119	123
Marketing Sales & Services	696	575	2	2
Science, Technology, Engineering & Math	1,420	222	246	61
Transportation, Distribution & Logistics	1,422	114	1,075	61

TABLE 2: DISAGGREGATED ENROLLMENT DATA BY LEVEL

	Secondary Students	Post-secondary Students
GENDER		
Male	63,633	22,781
Female	71,053	33,768
RACE/ETHNICITY (1997 Revised Standards)		
American Indian or Alaskan Native	195	158
Asian	1,294	531
Black or African American	12,994	5,142
Hispanic/Latino	4,440	1,374
Native Hawaiian or Other Pacific Islander	87	55
White	113,216	45,163
Two or More Races	2,375	1,571
Unknown	85	4,287
SPECIAL POPULATIONS AND OTHER STUDENT CATEGORIES		
Individuals With Disabilities (ADA)		1,190
Disability Status (ESEA/IDEA)	8,274	
Economically Disadvantaged	70,742	34,402
Single Parents	320	249
Displaced Homemakers		9
Limited English Proficient	1,517	66
Nontraditional Enrollees	33,253	13,465

H		Funds for Secondary Recipients		7901450	0	7901450	7901450	0	7901450	0	7901450	7430851	-470599
I		Funds for Postsecondary Recipients		6100766	0	6100766	6100766	0	6100766	0	6100766	6875758	774992
J		Total (Row H + I)		14002216	0	14002216	14002216	0	14002216	0	14002216	14306609	304393
K		TOTAL LOCAL USES OF FUNDS (Row F + J)		15039800	0	15039800	15039800	0	15039800	0	15039800	15219800	180000
L		State Leadership											
M		Non-traditional Training and Employment		60000	0	60000	60000	0	60000	0	60000	64185.61	4185.61
N		State Institutions		150000	0	150000	150000	0	150000	0	150000	107584.2	-42415.8
O		Other Leadership Activities		1580565	0	1580565	1580565	0	1580565	0	1580565	1618795	38230.18
P		TOTAL STATE LEADERSHIP (Row M + N + O)		1790565	0	1790565	1790565	0	1790565	0	1790565	1790565	0
Q		State Administration											
R		Total State Administration		895282	0	895282	895282	2170060	-1274778		-1274778	895282	2170060
S		TOTAL TITLE I FUNDS (Row K + P + R)		17725647	0	17725647	17725647	2170060	15555587	0	15555587	17905647	2350060
Additional Information:													