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**Consolidated**

**Annual Report**

**2013**

**Program Year**

**July 1, 2012 – June 30, 2013**

**Kentucky Department of Education**

**Office of Career and Technical Education**

**20th Floor, Capital Plaza Tower, 500 Mero St. Frankfort, KY 40601**

**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 and provides technical assistance to secondary career and technical education programs, oversees, and monitors Perkins grants to the Kentucky Community and Technical College System (KCTCS) colleges within 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) was designated to manage program assessment for secondary career and technical education (CTE) programs by a 2000 legislative initiative.  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 2-year cycle of assessment team visits.  OCTE provided technical support for continuous improvement within the locally and state operated technical education programs. The** Office of Career and Technical Education 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.  Approximately 50 percent of the schools are visited each year by assessment teams.  These teams consist of a university teacher educator as the leader, an industry representative, and state staff from secondary and post-secondary educational agencies.  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 to access 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 3.65. This is an increase of 0.03 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.

**(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 fifth time during the 2012-2013 school year. 55 instructors signed up to take advantage of the service. A total of 1573 Students were enrolled in the online classes, and a total of 5564 modules/classes were taken and passed by those students.

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 on a 24/7 basis.

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 are also developed in partnership with Skills USA and AYES, which makes the tests even more relevant to the courses taught in the Automotive Curriculum.

Many of the Kentucky Tech Automotive Programs gave the ASE Student Certification Tests in April/May of 2013, and the results were sent to OCTE immediately after the tests were completed, thanks to the switch to online testing. These tests are considered the “Gold Standard” by Perkins. The number of students passing the tests averaged out to around 80%. Two hundred twenty (220) students took the tests, and 178 passed, some in more than one area. Students will receive certificates for the areas passed. 10 of the schools that gave the ASE Student Certification Tests were top users of the program, and the programs use was reflected in their ASE Student Certification Test Scores. These tests also count as Industry Certificates in Kentucky, and contribute to the States College and Career Readiness initiative.

Today’s Class, through its career-based online automotive series, has elements that helped us continue to meet many of the requirements of the Perkins IV legislation, which is a major source of funding for our programs. They are also considered an “Industry Certificate” by a majority of states.

Health Science instructors across the state have utilized the PassAssured Pharmacy Technician Training Program for the third consecutive year.  This program is an on-line and clinical course that prepares students for the Pharmacy Technician Certification Board examination (PTCB) in order to obtain national certification.  This course is accredited by the Accreditation Council for Pharmacy Education (ACPE).  This is the same agency that accredits professional programs of colleges and schools of pharmacy.  Instruction is provided by a pharmacist and consists of on-line modules and instructional videos followed by exams.  The program is designed for independent study and allows the student to progress at his or her own rate.  Since it is online, it is available 24/7 so the student can access it at home as well as at school.   The six modules include:  orientation; federal law; medical review; aseptic technique; calculations; and pharmacy operations; and will be presented throughout the session.  Teacher resources including lesson plans, automated test grading systems, the ability to grant/deny student access to exams, and a process for viewing all student activity.  A messaging system also allows for messages to and from the teacher and the student. Besides the online instruction, students are required to complete a minimum of 50 hours of clinical rotations (40 in retail and 10 in hospital pharmacies). This practicum provides supervised on-the-job work experience related to the students’ education objectives in the area of pharmacy.  This year, 32 KY Tech instructors participated. One hundred eighteen students utilized the program.  Five programs were not utilized.  Seventy-seven programs were completed and 49 students tested.  Thirty-four students passed the national certification test and fifteen students failed.  Forty-one programs were not completed.  Ten students are employed as pharmacy techs.

Health Science instructors within the Kentucky Department of Education and the Area Technology Centers utilized Melior Online Resources for the third year.  Fifteen (15) instructors made use of the program and who served 298 students.  Seven hundred thirty-seven (737) modules/classes were taken by students in participating programs. This was a decrease from the previous year. Because of the decreased interest in this classroom resource, the contract will not be renewed.

The manufacturing technology programs across the state made significant improvements in their ability to offer increased industry certification to the students of the Commonwealth. In Computer Aided Drafting (CAD), 14 of the 19 CAD instructors received certifications. Thirty-three students who took the CAD student certification received the AutoCAD certified users and ten received the AutoCAD Inventor Certification. Nineteen students in Machine Tool Technology received the National Institute for Metalworking Skills (NIMS) Certification. Fifty-two students in Industrial Maintenance Technology received the National Center for Construction and Educational Research (NCCER) certification. Nine Wood Manufacturing Technology students received the Woodworkers Career Alliance Certification. Three hundred and twelve Welding Technology students received the American Welding Society (AWS) Certification. Manufacturing as a whole, had a 50% pass rate on the Kentucky Occupational Skills Standard Assessment (KOSSA).

The Kentucky Community and Technical College System (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. The KCTCS also provided a variety of initiatives geared toward technical/program faculty development including a Master Teacher Seminar, New Horizons Conference on Teaching and Learning, Scenarios Online, the Ashland Teaching Learning Conference, Content Literacy Training, and the popular Teaching Consultation Program as well as many discipline specific opportunities.

**(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**

One of the critical issues facing career and technical education teachers is the ability to stay current with the knowledge and skills required for employees in the business and industry sectors their programs represent.  Each year, teachers have the opportunity to attend training to ensure their instruction reflects any changes that may be occurring in business and industry.   Professional development activities were held throughout the year on a variety of topics requested by teachers.  The classes were specifically designed for each program area.  The classes ranged in length from two to five days and provided hands-on training in the latest equipment, software and teaching materials.  The training was available for all CTE instructors from public secondary and post-secondary institutions. A total of 235 teachers participated in the 13 workshops offered.  The workshops provided exposure to current and emerging industry trends and technologies. Some teachers earned nationally recognized industry certifications in their respective fields.  Participants also had an opportunity to network, share ideas, and identify resources.

The New Principal Institute (NPI) was designed to provide new area technology center principals overall information that focused on major goals and objectives of a school principal.  This workshop is conducted yearly 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, two new principals attended the training and eight principals attended the follow-up sessions.

The NPI workshop provided specific information to support the new principal’s growth as a professional person to continue improving; 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 local boards of education; and working with business and industry/community partners.

This year, ten (10) 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.

**(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 National Academy Foundation’s (NAF) education model to build “learning communities” that empower high school students to successfully go on to higher education is aligned to Kentucky’s Unified Strategy for College and Career Readiness.  Career academies will help to ensure the preparation of students for postsecondary education while providing them with skills and experience necessary to attain entry-level jobs.  Students in career academies take a blend of career and academic classes linked to academic and industry standards promoting high achievement.  These academies focus on finance; hospitality and tourism; information technology; health science and engineering.  There are eight career academies.  Each academy started with approximately 40 or more students and should continue to expand up to 50 students per grade level. NAF is a collaborative partnership with Project Lead the Way, the STEM Academy; and ConnectED.

**(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 the Office of Career and Technical Education is providing support and guidance to secondary and postsecondary schools through workshops, technical assistance, website and the 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 emails, 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.  Posters were printed and distributed to secondary and postsecondary schools that depict students in nontraditional careers, such as female students in Welding, Automotive, and Electricity; as well as male students in Health Science.  They have proven to be very popular and schools utilize them in hallways and classrooms.  Also, a video was produced in which students in secondary and postsecondary schools who were enrolled in nontraditional career and technical programs were interviewed.  The video also focuses on the link between academic and technical education and the importance of both in lifelong education and the workforce.  The videos have been emailed to all schools with CTE programs. They have also been continuously shown at conferences and workshops. This past year, a competitive grant to hold a career camp with nontraditional programs was offered to secondary and postsecondary schools. A total of ten schools (three postsecondary, five secondary high schools, and two secondary Area Technology Center’s) held career camps for nontraditional programs. Schools reported the career camps were a huge success. Two principals from these schools presented the career camp at a guidance counselor conference and at the career and technical education summer program. An estimated total of 500 students attended the career camps with nontraditional programs statewide. Hopefully, these efforts will increase student interest in nontraditional careers at an earlier age.

**(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. 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. Consideration was given to the following pathways: Manufacturing, Health, Construction, Information Technology, Engineering (STEM), Transportation, Communication, Human Services, Business, and Agriculture.

The president (or designee) of the Kentucky Community and Technical College System 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.

**(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 was also 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. This type of training allows instructors to remain current with industry trends and teaching methods. 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.

The New Teacher Institute (NTI) was held three times from July 1, 2012 to June 30, 2013. This included three five-day sessions and two three-day follow-up sessions. At each five-day session of the NTI, a 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 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 was also used to expand curriculum development with a focus on integrated academic and technical activities.

The Office of Career and Technical Education in conjunction with the Kentucky Department of Education, College and Career Readiness Branch, 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 two regional fairs 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.

Employees in the Kentucky Community and Technical College System 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. The Kentucky Community and Technical College System 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 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 for 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 is also disseminated via a newsletter and a website. The association board members also 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 TEDS database system, 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 are 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 Perkins Compliance 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 2012-2013 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.

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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 O’Nets to meet the challenges faced in each program area. Changes and upgrades to the Kentucky Tech Curriculum have been made in such a way as to provide a seamless transition while mirroring the changes within the Kentucky Community and Technical College System. The Commonwealth Office of Technology is responsible for maintaining and continually upgrading the Kentucky Tech Curriculum website which houses the curriculum and lesson plan database as well as individual consultant’s sites. All Kentucky Tech principals, instructors and personnel have access to this website which can be used to obtain a variety of informational tools and resources. Additionally, the Common Core State Standards adopted by the Kentucky Department of Education are now connected to the lesson plans.

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 post-secondary 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

The area technology centers depend largely upon the local school districts to provide counseling for their students.In 2012-2013, there were ten career coaches working at the Area Technology Centers (ATC’s). Career coaches worked one-on-one with approximately 250 students in the Area Technology Centers. They worked with the principal and staff to help individual students, small groups, classes, parents and at school events, emphasizing such issues as Individual Learning Plans (ILPs); completing the Free Application for Federal Student Aid (FAFSA) for both students and parents; the College Cost and Planning Report; choosing careers and planning high school classes accordingly; choosing a postsecondary path; studying for placement tests; general study skills; applying to college and individual programs; applying for scholarships; and college visits, etc. The principals at the ATC's supervise the coaches. Monthly log reports are submitted to Northern Kentucky University/Kentucky Campus Compact (AmeriCorps program).

## (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. 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 colleges work closely with their regional 4 year institutions to ensure that all students have viable pathways to bachelor’s degrees. Dual credit programs are aligned with secondary CTE programs, and provide secondary students with accelerated, low-cost access to postsecondary credentials. KCTCS programs all include pathways with stackable credentials – certificates that build into diplomas and diplomas into associate degrees. Additionally, KCTCS also 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.

**(4) Supporting Career and Technical Student Organizations**

Kentucky CTE instructors have always been strong supporters of student organizations. Students enrolled in career-technical education were encouraged to develop leadership skills through participation in student organizations. Regional, state, and national conference participation was encouraged. 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 to compete in and develop leadership skills. Through the leadership training opportunities and the competitions, technical skills taught in the classroom were enhanced. Advisors supervised students at conferences and attended updates for conference activities, award programs, ran competitive events, and participated 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**

This year Kentucky has initiated a new program that focuses around a pre-apprenticeship program for students still in high school. The Tech Ready Apprentices for Careers in Kentucky (TRACK) Pre-Apprenticeship Certification is piloting the 2013-14 school year to meet the needs of manufacturing industries. The TRACK program is a partnership between The Office of Career and Technical Education 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 post-secondary apprenticeship training.

​Fall 2013 will be a pilot program for thirteen high school technology centers in manufacturing. The employer will choose from the manufacturing course offerings at the school to design their program. A minimum of 4 courses are required, with one of the courses being a cooperative education placement. Upon successful completion, the student will be awarded an industry certification by the employer through The Labor Cabinet and all on-the-job hours worked will be counted towards the apprenticeship. The certification will also count towards the local school district’s college and career ready accountability index

**(6) Supporting Family and Consumer Sciences Programs**

In Kentucky, 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 is designing 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) 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 2012-13 have been used to accomplish the following activities:  implementation and administration of the 2012-2013 KOSSA; data analysis and technical assistance; update, building, and management of assessment item banks; correspondence 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 of 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 CTE Summer Conference; and investigation and pilot of an online system for assessment.

The Kentucky Community and Technical College System 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. Import and rollover programs 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 120 school staff attended the training sessions including secretaries, principals, teachers and institutional research coordinators.  In-service sessions are held as needed to train and retrain individuals to input data into TEDS. Traditional group training in Frankfort, Kentucky is being transitioned to individual training using webinars with modules for each topic so schools may access training for a specific area whenever needed. Approximately 80 school staff attended the training sessions including secretaries, principals, teachers and institutional research coordinators. A CTE summer program is held each year in July and approximately 350 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 are also required to prepare and present a lesson presentation that will be critiqued by participants.  The initial five-day training is followed up 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.  Fifty-four (54) new teachers participated in the New Teacher Institute five-day workshop, and 50 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 field-based teacher educator from the state’s universities is an advisor and resource person for professional development activities and certification requirements. The Kentucky CTE New Teacher Mentoring Pilot Program was developed by the National Research Center for Career and Technical Education as a technical assistance project for Office of Career and Technical Education. The overall purpose of the Kentucky CTE New Teacher Mentoring Pilot Program was to offer mentor support to newly hired CTE teachers who had attended the New Teacher Institute (NTI) and were embarking on their first year of teaching. Overall, the mentors and new CTE teachers who participated in the program found it beneficial and were highly supportive of the program.

In order to encourage newly hired technical instructors to pursue degree requirements, regional universities awarded up to 18 credit hours for the successful completion of a written and performance National Occupational and Competency Testing Institute (NOCTI) exam. Newly hired technical instructors are required to successfully pass the written NOCTI to determine their competence in the program area in which they are to be hired. Eighteen (18) written exams were given this past year with a 100% pass rate. In order to receive college credit, two (2) instructors also elected to complete the performance NOCTI. KY Tech instructors are required to obtain professional skill certification in their program area, such as ASE, AWS, CISCO, CTIA, NCCER, NIMS and MOS. National certification for teachers is required by the KY TECH system of career technical centers and highly encouraged within the other career tech programs in the state.

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.  Every program area has either an industry certification or a state developed end-of-program assessment.

The Skill Standards assessments were developed by 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 is 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 20,817 students took a technical assessment in 2013.  There are a total of 26 assessments currently available.  Development of standards and assessments in additional areas is underway with planned implementation in 2014.

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

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| --- | --- | --- | --- |
| **Measure** | **State Goal** | **State Measure** | **Number of Schools NOT Meeting 90% of Goal** |
| 1S1 – Academic Attainment Reading: | 39.69% | 69.69%(+5.99%) | **3** |
| 1S2 – Academic Attainment Math: | **27.60%** | **27.39%**  | **140** |
| 2S1 – Technical Skill Attainment: | **63.00%** | **59.85%****(-1.80%)** | **136** |
| 3S1 – School Completion: | **95.78%** | **99.13%****(+0.43%)** | **2** |
| 4S1 – Graduation Rates: | **88.84%** | **97.50%**(-.43%) | **6** |
| 5S1 – Placement: | **92.62%** | **90.18%** (-0.29%) | **51** |
| 6S1 – Nontraditional Participation: | **34.00%** | **37.63%** **(-0.10%)** | **92** |
| **6S2 – Nontraditional Completion:** | **24.00%** | **19.99%** **(-1.87%)** | **156** |
|  |  |  |  |
| **Measure** | **State Goal** | **State Measure** | **Number of Schools NOT Meeting 90% of Goal** |
| 1P1 – Technical Skill Attainment: | **73.00%** | 77.77% **(-13.05%)** | **9** |
| **2P1 – Credential/Certificate/Degree:** | **89.10%** | **77.91%****(-12.91%)** | **13** |
| 3P1 – Student Retention or Transfer: | **61.00%** | **92.06%****(-4.94%)** | **2** |
| 4P1 – Student Placement: | **61.00%** | **77.75%** **(+8.85%)**  | **3** |
| 5P1 – Nontraditional Participation: | **16.00%** | **25.23% (+3.03%)** | **8** |
| 5P2 – Nontraditional Completion: | **11.00%** | **12.11%** **(-4.21%)** | **11** |

Kentucky exceeded the 90% adjusted level of performance on all but two of the required Perkins core indicators for FY 2012: Non-Traditional Completion (6S2) and Credential Certification or Degree (2P1). While Kentucky exceeded the 90% adjusted level of performance for the Perkins measures Academic Attainment Math (1S2); Technical Skill Attainment (2S1); Secondary Placement (5S1) – the goals set forth in the Kentucky State Plan were not met. Therefore, the following plan will be used to improve these five areas.

GOAL 1: No later than October 2014, Increase from 19.99% to 21.5% the percent of secondary school CTE concentrators from under represented gender groups who completed a program that leads to employment in nontraditional fields.

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| --- | --- | --- | --- | --- |
| **ACTIVITY** | **BEGIN DATE** | **END DATE** | **RESOURCES/FUNDING** | **RESPONSIBLE** |
| OCTE will send out monthly reminders to the KY Tech Principals to conference with students enrolled in NON-TRAD programs to encourage program completion | JAN2014 | OCT2014 | Perkins Admin | Whitaker |
| Create brochures to give to students enrolling in NON-TRAD programs that congratulate them on their choice, outlines future job positions and salaries, Courses needed to complete the program and Industry certifications they could earn | JAN2014 | OCT 2014 | Perkins Leadership | OCTE Career Pathways Branch |

GOAL 2: No later than October 2014, increase from 77.9% to 90% the percent of Postsecondary CTE concentrators who received an industry-recognized credential, a certificate, or a degree.

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| --- | --- | --- | --- | --- |
| **ACTIVITY** | **BEGIN DATE** | **END DATE** | **RESOURCES/FUNDING** | **RESPONSIBLE** |
| Conduct a data review in cooperation with KCTCS to investigate root cause of the problem. (Data Entry, Data Collection, Programs with Low Pass Rates) | JAN2014 | FEB 2014 | Perkins Admin | Galliher |
| KCTCS will conduct targeted professional development for programs with low skill attainment numbers to address deficiencies | FEB 2014 | JUL2014 | Perkins Leadership | KCTCS |
| KCTCS will utilize basic grant money to update equipment and curriculum in the program areas with low skill attainment to ensure students have access to current industry standard equipment. | FEB 2014 | SEP2014 | Perkins Basic Grant | KCTCS |

GOAL 3: No later than October 2014, increase from 27.39% to 29.6% the percent of secondary school CTE concentrators who have met the proficient or distinguished level on the ACT Algebra II end of course mathematics assessment

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| --- | --- | --- | --- | --- |
| **ACTIVITY** | **BEGIN DATE** | **END DATE** | **RESOURCES/FUNDING** | **RESPONSIBLE** |
| Conduct training at the summer CTE Conference on incorporating mathematics in the CTE classrooms | FEB2014 | JUL2014 | Perkins Leadership | OCTE Career Pathways Branch |
| Upload lesson plans into CIITS that contain math embedded into the CTE courses | DEC2013 | OCT2014 | Perkins Leadership | OCTE Career Pathways Branch |

GOAL 4: No later than October 2014, increase from 59.85% to 65% the percent of CTE concentrators at the secondary level who passed a technical skill assessment that is aligned with industry-recognized standards (KOSSA/Industry Certification).

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| --- | --- | --- | --- | --- |
| **ACTIVITY** | **BEGIN DATE** | **END DATE** | **RESOURCES/FUNDING** | **RESPONSIBLE** |
| Provide assistance with curriculum and instructional modifications. Communicate with schools to ensure they are inputting all industry recognized assessments administered to students into the TEDS data system. | JAN 2014 | MAY2014 | NA | Tipton |
| Require schools not meeting 2S1 measure to submit school improvement plans showing how the Perkins funds will be utilized to make program improvements in curriculum and teaching strategies. Emphasis on targeting sub populations identified. | FEB2014 | APR2014 | NA | Tipton |
| Implement online KOSSA testing to ensure proper test for program area. Run test analysis to determine major areas of weakness by school. Provide analysis information to schools. | NOV 2013 | APR 2014 | Perkins Leadership | Moore |
| Presentation at Summer CTE Conference over Data Analysis of schools and programs with high Skill Attainment to share what works | MAY2014 | JULY2014 | Perkins Leadership | Moore |

GOAL 5: No later than October 2014, Increase from 59.85% to 65% the percentage of CTE concentrators at the secondary level who leave secondary education and are placed in postsecondary education or advanced training, in the military service, or employment.

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| --- | --- | --- | --- | --- |
| **ACTIVITY** | **BEGIN DATE** | **END DATE** | **RESOURCES/FUNDING** | **RESPONSIBLE** |
| Data Collection Efforts -650 students had no Placement data entered about ½ from ATC remainder from KCTCS and local districts. OCTE Will run regular reports to monitor proper data entry at the school level | JAN2014 | OCT2014 | Perkins Admin | Whitaker |
| UI matching – explore the possibility of using UI matching data to obtain more accuracy on number of secondary students entering the workforce | DEC2013 | OCT2014 | Perkins Admin | Whitaker |

With the Perkins 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 2012-2013 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 listed below by performance measure.

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 and in the New Principal Institute (NPI) initial and follow-up workshop.

Data will continue to be analyzed routinely by school and program to determine specific program areas or student populations in need of assistance. Data audits 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 definitions. 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.

Awarded competitively through a Request for Proposal (RFP) process, reserve funds were used to fund a third year of career pathway development. Of the 16 schools that participated in the first two years of the project only 12 applied for the third year, of which 11 were awarded grants due to the Kentucky School for the Deaf being deemed ineligible to utilize reserve funds. The schools involved focused on career pathway development including the lesson plans, hands-on learning activities integrated with academics, and career guidance information that could be provided to middle and high school students associated with the pathway. One of the criteria was that all educational institutions receiving awards must have a committee comprised of a business and industry representative, middle school teacher, high school teacher, postsecondary teacher and counselors. Working together, the hope is that a partnership will be built that will allow a student beginning in middle school to begin a career pathway leading to additional education in the field after high school and eventually to a job. Articulated credit is also a requirement at the postsecondary level. Each proposal was reviewed and evaluated by a team of reviewers appointed by the Office of Career and Technical Education.  A scoring rubric was used by the review team.  Some of the reserve fund recipients also presented at the annual CTE summer program through presentations and sessions.

**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 were also 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 thecommunity 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



APPENDIX 2: Disaggregated Postsecondary Performance Data



APPENDIX 3: Disaggregated Enrollment Data

TABLE 1: ENROLLMENT BY PROGRAM AREA



TABLE 2: DISAGGREGATED ENROLLMENT BY LEVEL



APPENDIX 4: Final Financial Status Report 2011-2012



APPENDIX 5: Interim Financial Status Report 2012-2013

