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CONSOLIDATED ANNUAL REPORT
FISCAL YEAR 2006

The Kentucky Office of Career and Technical Education is committed to providing the leadership and guidance necessary to provide the citizens of Kentucky with the best career technical education available. We continually work to improve the quality of programs and instruction utilizing input from industry, community leaders, students, parents and educators. Collaboration among various in-state agencies, statewide workshops and conferences, and targeted technical assistance are ongoing to assure quality services are being provided to all students. Our goals are for all technical programs to continuously improve, meet the Perkins accountability indicators, encourage more stringent and frequent program assessments, and to keep programs current with business and industry.

STATE ADMINISTRATION

Sole State Agency and Governance Structure. The Kentucky Office of Career and Technical Education is a part of the Kentucky Education Cabinet. The Kentucky Workforce Investment Board (KWIB) is the eligible agency that administers the Perkins grant; the regulation making the KWIB the eligible agency was codified in 2006. The Kentucky Workforce Investment Board delegated authority to the Executive Director of the Office of Career and Technical Education to administer, supervisor, and evaluate activities related to the Perkins Act. The Federal Programs Branch was responsible for carrying out the provisions of the Act as approved by the Executive Director for the Office of Career and Technical Education. The Office of Career and Technical Education has contracted with other educational agencies and institutions for the purposes of meeting the requirements of the law and improving technical education. The Kentucky Workforce Investment Board is responsible for the four requirements mandated in the law. An organizational chart can be found in Appendix A.

The responsibilities for administering the Perkins grant included:

1. developing, distributing, and compiling the results of a statewide survey to identify leadership activities needed;
2. holding one formal advisory committee meeting to receive input for the State Plan's continued implementation and improvement;
3. monitoring program expenditures to assure compliance with Perkins legislation;
4. allocating funds, approving local applications, approving leadership grants, entering into Memoranda of Agreements with universities, contracting with the Kentucky Department of Education and the Kentucky Community and Technical College System to distribute funds to local education agencies, monitoring, and approving requests for reimbursement;
5. coordinating with other agencies;
6. collecting accountability data, preparing reports for analysis, and providing training to individuals who input accountability data into the Technical Education Data System (TEDS);
7. working with programmers on an ongoing basis to further develop and improve the current TEDS system;

8. granting waivers to eligible recipients that do not have other eligible recipients within a reasonable distance to enter into a consortia; and
9. providing technical assistance

Organization of Vocational and Technical Education Programs. Kentucky secondary and postsecondary students are enrolled in 115 different career and technical education programs across the state. Programs are offered to students in middle and high schools, area technology centers serving secondary students, a virtual area technology center, community and technical colleges, correctional facilities, and regional universities across the state.

Kentucky has implemented 14 career clusters, each of which provides a way for schools to organize instruction and student experiences within that academic area. These clusters encompass virtually all occupations from entry through professional levels. The selection of career clusters and career majors became more important in 1998 with the revision of Kentucky Administrative Regulations on minimum requirements for high school graduation. Section two of 704 KAR 3:305 states, "that beginning with the graduating class of 2002 each student in a common school shall complete an Individual Graduation Plan which incorporates emphasis on career development."

In June 2006 a statewide committee began working to extend the career cluster work to include career pathways. A committee was formed and given the tasks of defining career pathways in Kentucky, designing a template for aligning curriculum, and developing six model career pathways templates to be used by local education agencies. The Career Pathways committee developed the following definition: "Career Pathways are systemic frameworks for transforming our education institutions by proactively addressing the needs of students and employers across the learning continuum. A program of studies for each career pathway is a coherent, articulated sequence of rigorous academic and career/technical courses, including dual credit opportunities, leading to postsecondary degrees and industry recognized certifications and/or licensures. Career Pathways are developed, implemented and maintained in partnership among secondary and postsecondary institutions, business and employers. They are available to all students, including adult learners and are designed to lead to rewarding careers."

During the spring of 2007, six work teams consisting of secondary teachers, agency staff, KCTCS faculty, university faculty, and business and industry representatives will use a curriculum template to align curriculum in six career cluster areas. Those clusters include Manufacturing, Health Sciences, Education, Construction, Information Technology, and Science/Technology/Engineering/Mathematics. A target completion date for the career pathway models is August 1, 2007.

STATE LEADERSHIP

Required Activities and Permissive Activities. An assessment instrument 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. 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 post-secondary education.

During the school year, one-half of programs at the secondary level were visited by assessment teams. These teams consisted 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 were 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, 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. During the past fiscal year, 54 secondary schools with 192 programs were visited. A web site has been developed 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.

End of course assessments are being developed for all career-technical programs within the area technology centers. Assessments were piloted in the 2006 fiscal year in the Automotive Technology and Business Technology programs. These assessments were delivered via the internet and CPS technology. New assessments were developed in Health Sciences, Business Technology and Auto Body Technology. The intent is to pilot these assessments in the 2007 fiscal year. Other programs will be added each year.

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 how their students "measure up" to others statewide 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 career and technical education programs in Kentucky. An online format of the Kentucky Occupational Skill Standards Assessment was made available beginning in 2005 with approximately 1500 students participating. The number increased to 2400 students testing online in 2006. The online system provides an accessible format of the assessments which can be used by students requiring assistive technologies for assessment.

The Skill Standards assessments were developed "in house" with input from business and industry representative and teachers. All students who are enrolled in technical programs at the secondary level in local high schools and area technology centers who have completed or are currently enrolled in the 3rd credit of a career major take the appropriate test for the career area in which they are enrolled each spring. Although successfully passing the test is not a requirement for their graduation, 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 future employers.

The Kentucky Community and Technical College System continues it's ongoing project of utilizing DACUM and Work Keys together as a means of determining the accountability of its programs. This project assists faculty in determining if the student has met a previously defined standard and serves as a means of measuring student knowledge prior to entry into a program and also upon exit from the program.

Technology continued to be improved and expanded throughout the programs at both the secondary and postsecondary levels. Computers and software were upgraded and more schools were able to access the internet. The Office of Career and Technical Education (OCTE) established an eLearning system in conjunction with the state Department of Education's vision to develop a common eLearning mechanism for course and content management in Kentucky. The OCTE's goal is to provide technical education to students with little or no access to technical programs related to their Individual Graduation Plan. Use of eLearning during the 2006 fiscal year increased to 1,000 students and 52 teachers covering 77 courses. Teachers describe the system as "gold for my soul" and students state "it is very challenging but the results are great." One parent stated "this online class has opened up a door for my son that he did not know was possible." eLearning will continue to be a priority educational tool for the Office of Career and Technical Education.

A current initiative of OCTE is the development of a Geographic Information System (GIS) curriculum. GIS has long been the forte of the military, universities, and government agencies with the finances and computing power necessary to harness it's capabilities. Changes in technology have made GIS affordable to K-12 schools. As a result OCTE has embarked on a pilot process to integrate academics and community service with GIS technology. GIS is an integrated technology, relying on innovations from different disciplines: geography, cartography, photogrammetry, remote sensing, surveying, geodesy, civil engineering, statistics, computer science, operations research, artificial intelligence, demography, and many other branches of the social sciences, natural sciences, and engineering have all contributed.

The Kentucky Community and Technical College System continued its planning and development of on-line courses. Partnerships were formed between secondary and post secondary 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.

Professional development activities were held throughout the year on a variety of topics requested by teachers, including learning to use technology in the classroom, integration of academics and technical skills, classroom management, and working effectively with

special population students. In addition, short-term upgrade classes for technical instructors were offered during the summer. The classes were specifically designed for each program. The classes ranged in length from one to five days and provided hands on training in the latest equipment, software and teaching materials. A total of 116 workshops were offered across the state. Workshop attendance by secondary instructors increased this year with a total of 1,044 instructors participating, including 812 from the Area Technology Centers, 142 from the Department of Education, and 11 from Juvenile Justice Centers. The postsecondary institution instructor attendance increased; 73 instructors from the community and technical college and five from the universities attended workshops compared to 36 last year. This resulted in a total of 1,874 days of training, an increase of 461 days from last year. A statewide three day conference was also held with both secondary and postsecondary instructors invited to attend. Instructors who attended the conference had an opportunity to network, share ideas, locate resources, and develop new instructional strategies. The Kentucky Community and Technical College System (KCTCS) provided a variety of initiatives geared toward technical/program faculty development including a Master Teacher Seminar, New Horizons Conference on Teaching and Learning, ScenariosOnline, the Ashland Teaching Learning Conference, Content Literacy Training, and the popular Teaching Consultation Program as well as many discipline specific opportunities

The New Teacher Institute (NTI) is a joint effort between the state universities offering an approved teacher education-training program (certification) and the Kentucky Department for Workforce Investment. New technical teachers employed by the Education Cabinet, 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 control, and lesson plan preparation in their first year of teaching. Participants are also required to prepare and present a lesson presentation that is critiqued by participants. The initial five-day training is followed up three to six months later with a two-day workshop. The two-day workshop brings participants together with experienced educators 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. A total of 120 new teachers participate in the New Teacher Institute workshop each year. 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.

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. In order to receive college credit, 17 instructors also elected to complete the performance NOCTI. Instructors were also encouraged to obtain professional skill certification in their program area, such as ASE, AWS, CISCO, CTIA, NCCER, NIMS and MOUS.

A Technology Education Summit involving teacher educators was held to explore curriculum changes in teacher preparation programs. An outside consultant with expertise in redesigning programs was involved in setting new initiatives. Since the Program of Studies reflected a need for different faculties, a guide to assist in the planning of new and renovated facilities was developed.

The New Principal Institute (NPI) was designed to provide new area technology center principals overall information that focuses on major goals and objectives. The NPI Workshop provides information to support the new principal's growth as a professional person to continue improvement, learning and understanding of Instructional Improvement, Technical Education System in Kentucky, Management of a Technical School, Supervision, Administration and Budget Information, Rules, Regulations and Responsibilities, School and Program Issues, Working with Local Board of Education, and Working with Business and Industry/Community Relations. This workshop is designed to provide the new principal with learning activities such as Problem-Solving, Brain-Storming, Team Work, Role Playing, Time Management, and Communication Skills. This year NPI provided training to 13 new principals and a follow-up session to 4 principals.

The New Teacher Academy (NTA) has been developed for 1st, 2nd and 3rd year secondary teachers that have completed a B.S. Degree and who are presently teaching in a career and technical education program. New teachers are teaching during their first, second or third year in a career and technical education program. The workshop is designed to provide relevant teaching competencies based on the new teacher standards. At the same time, provide new teachers an opportunity to reflect on and analyze their teaching practices and to make curriculum and management adjustments necessary for ensuring maximum student learning. This year training was provided to 45+ teachers.

Both secondary and post-secondary curriculum within our state is constantly undergoing revision and development to meet the changing needs of industry, provide students with skills to be successful in the workplace, and assure integration of academic and technical content. Secondary curriculum for the KY Tech Area Technology Centers was reviewed and evaluated by teams of instructors, state supervisors of instruction and business and industry representatives to assure that skills demanded by industry were being taught. During the year, eight programs were revised and 38 programs were reviewed. Instructors and business and industry representatives assisted with the review and revisions. No new programs were added and one program was closed during the year. The secondary curriculum used within KY TECH is aligned with that being used in post-secondary KCTCS technical colleges to allow a seamless transition for students from secondary to post-secondary technical education. The curriculum also integrates academic and technical skills. The web-based curriculum database system was revised to include all skill standards available in Kentucky. A lesson plan database has been developed to assist new instructors in choosing appropriate educational activities for students that are aligned with KY TECH curriculum. The lesson plan database is available to anyone having web access. Both the lesson plan and curriculum databases have been very well received by teachers and are continually being updated to meet instructional needs.

The Kentucky Department of Education (KDE) continued its development and revision of the Program of Studies. Particular attention was paid to the integration of math and

science. Other aspects of development included alignment of academic expectations, core content for assessment, technical content, skill standards and SCANS. Program of Studies revision for Industrial Education was limited to the construction cluster. A committee of KCTCS instructors and secondary instructors developed a career pathway consisting of sequences of courses from secondary to community/technical colleges and four-year institutions. Consensus on the pathway was obtained from a broad group of stakeholders including teachers, administrators and business and industry. A new course, Introduction to Construction, will be piloted during the 2006-2007 school year as well as CAD curriculum based on Geometry Standards. The Business Education Program of Studies was revised to reflect needs identified by business/industry, teacher educators, and teachers. This included updated titles of four career majors, revision of courses, the combination of courses and the recommendation for a new major on multi media. Changes in course content were incorporated by Business Education teachers assigned to revise specific courses. Standards established to guide the revisions included the following: courses to be upper level and high quality, technology standards be incorporated, alignment with academic expectations, core content and skill standards, safety notes as needed and updated course descriptions. Revisions in the Program of Studies for Health Science included changes in current courses and the development of three new courses. All courses were aligned to core content for assessment. The revised curriculum was distributed to thirty-two teachers for comment prior to final approval.

The Center to Advance the Teaching of Technology and Science Consortium produced significant resources and services for member states. These included the development courses in Blackboard for Invention and Innovations and Foundations of Technology, creation of Engineering by Design Network, and development of teacher resources. Also developed were two products, Exploring Technology and Engineering by Design Network. Products completed by the Mark ED Consortium in the area of curriculum and available to teachers and others in member states included revision of marketing standards, a crosswalk of core marketing standards with major textbooks, units of study in Finance, expansion of units of study in various topics, software packaging for each new or revised unit and validation of career clusters in Finance, Business, Management, and Administration and Marketing.

The establishment of a teaching major in Career and Technical Education necessitated the development of a new course, Principles of Teaching, to be piloted in eighteen schools. The year long course, aligned with core content was developed by academic and Career and Technical teachers with assistance of teacher educators from three of Kentucky's regional universities. The introductory course addresses teacher preparation and effectiveness foundations of education, curriculum an assessment, diverse learners, student organizations and educational issues with time for clinical and field experiences.

Career Networking: a Guide to Exploratory Experiences, was developed to serve as a tool kit and a source of information regarding career majors, job possibilities and related course content in three of the fourteen clusters. Curriculum materials were purchased in the program areas of Agriculture and Technology. These materials assisted in the alignment to core content, emphasized high levels of science, and were essential in teaching interdisciplinary courses. Five regional conferences were held to train teachers on the use of materials. Tech-know instructional materials emphasizing the integration of math and science were purchased for Technology teachers.

KCTCS also continued development and implementation of DACUM/Work Keys profiles of each program area being taught. The profiles were provided to curriculum committees for consideration and inclusion in the development/revision/alignment of the KCTCS curriculum. The process continues to earn KCTCS national recognition and the curriculum development and revisions will prepare graduates for entry into the workplace. The project has benefited the overall post-secondary system by allowing a means of measuring student knowledge prior to entry into the program and also upon exit from the program to determine if the student has met a previously defined standard. Accrediting body guidelines were utilized to update curriculum and to ensure that graduates were ready to enter the workforce as competent practitioners.

The equity coordinators for the Department of Career and Technical Education continually strive to provide support and guidance to secondary and post-secondary schools through workshops, technical assistance and availability of resource materials. All schools are informed on a regular basis of trends and issues affecting non-traditional students through electronic newsletters from the National Alliance for Partnerships in Equity. Since the 1976 legislation, increasing the participation of students enrolled in programs preparing students for nontraditional employment has been a statewide goal. Several Perkins leadership grants were awarded at the post secondary level to develop materials to be used by all programs in the state. A website provides student information on nontraditional careers and several projects provided teachers with materials to utilize in the recruitment and retention of students to nontraditional programs. Posters are in the process of being printed that depict students in nontraditional careers. These posters will be distributed to schools to be displayed in classrooms and common areas. Flyers were developed and distributed to middle schools informing students about nontraditional careers. Summer camps for middle school students were held at 12 area technology centers across the state where students participated in hands-on activities in nontraditional areas. An informational video is being produced that will introduce prospective secondary students to career technical students across Kentucky who have completed nontraditional programs and are successfully working in their chosen career field. Hopefully, these efforts will increase interest in nontraditional careers at an earlier age.

The Corrections Education Unit of the Kentucky Community and Technical College System continued to provide high quality instruction for all students enrolled in career technical education within correctional facilities. Equipment purchases were a high priority for Perkins funds during the 2006 fiscal year. Software was updated to the latest versions used in industry. Professional development opportunities were made available to all instructors to assure they were updated on the latest technology, software, and instructional methods. Opportunities were also made available for teachers to develop instructional materials and methodologies that incorporated academics into their career technical courses. Career counseling continued to have a strong focus within the system.

Throughout the year, programs, services and activities have been provided for individuals with disabilities, those from economically disadvantaged families, individuals preparing for nontraditional training and employment, and those with limited English proficiency. Services provided included the services of special needs coordinators, readers, tutors, note takers and liaison personnel.

Perkins funds were used to strengthen the academic, career and technical skills by the development of standard based units of study. These units incorporated the technical content, core content for assessment relating to reading, language arts, mathematics, science, social studies, practical living/vocational studies and writing. Also included were elements of SCANS skills to emphasize the needs identified by business and industry. Strategies were identified for special populations throughout the documents (eg c-text, digitized text, etc.)

Technology was incorporated into the curriculum to assist special population students. Schools purchased computers, digital cameras and software to enhance education concepts and to adapt teaching to various learning styles of students. Support was provided to 15 liaison personnel who worked with CTE students on Individual Education Program – IEP at Area and Local Technology Centers throughout Kentucky. Career counseling materials were available at schools to encourage special needs students to enroll in high skill, high wage career preparation programs. Liaison personnel are certified in Exceptional Children Education. They serve as a liaison between the ATC and the home high school as well as provide instructional assistance to the students.

Professional development was provided for staff serving special population students in the various educational agencies. A project, "Career and Technical Education and Students with Disabilities and Career and Technical Special Education Team Planning" was provided for teachers, administrators and state staff. Two day training sessions for personnel focused on understanding the concept of special populations, strategies for working with students and how to coordinate programs, services and activities with Exceptional Children."

A special project, "Hispanic Culture Workshops," was developed to provide teachers and other personnel a better understanding of the culture and ways to work with Spanish speaking populations. Eighty CTE secondary teachers from across the state attended. Because of this growing population in Kentucky, many career and technical education teachers need professional development on "best practices" for working with the limited English barrier.

A series of six workshops were held to help CTE teachers better understand those students with disabilities and other special needs. Special population student accommodations were discussed. The New Teacher Institute includes a session on working with students with special needs to help the new teacher understand terminology, requirements, and the accommodations that should be made to help these students be successful. A similar session was included in the New Teacher Academy for teachers having some experience in the classroom. In addition, a summer CTE conference provided the opportunity for professional development of special needs educators by providing workshops such as "2006 Career Trends – Impact on CTE Programs," "Classroom Management and Aggressive Behavior," "Strategies for Teaching Every Student," "Teaching Smarter: A Classroom Management Tool," and "Blackboard: Web Enhanced Teaching."

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 discusses 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. 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 insures that they are ready for the challenges of college level classes. Many schools already meet the needs of ESL students and others are implementing English as a Second Language classes as the community population changes. Postsecondary educators are always striving to improve their services to meet new needs of the students.

During the past twelve months, both the Kentucky Department of Education and the Department for Technical Education conducted civil rights desk audits. On-site visits were used as monitoring tools for schools receiving Perkins funding.

Articulation agreements for all technical programs offered in secondary schools are in place and are constantly being reviewed. Discussions are ongoing with two-year technical colleges and eight regional universities within the state, and with selected private and technical colleges in the neighboring states of Indiana, Illinois, and Tennessee. The goal is to provide Kentucky students the opportunity for a seamless transfer of credits from the secondary to post secondary level, encouraging a better-educated workforce and potential economic development opportunities for our state.

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. Over 5,000 students from Career and Technical Students Organizations (DECA, FBLA, FCCLA, FFA, HOSA, PBL, Skills USA-VICA, TSA) represented Kentucky at national leadership conferences to compete in and develop leadership skills. From the 5,000 students attending the conferences, 513 competed in a range of technical and leadership competitive events. Of these 513 competitions, 207 individuals and teams brought home various awards, recognition and scholarships. Through the leadership training opportunities and the competitions, technical skills taught in the classroom were enhanced. Seventy-four advisors supervised students at conferences and attended updates for conference activities, award programs, ran competitive events, and participated in conference forums. 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.

Tech Prep continued to be an integral part of career technical education in Kentucky. An annual Tech Prep coordinators' meeting was held with over 200 people attending. Articulation agreements, integration of academic and technical subjects and other major components of Tech Prep implementation continued to grow. All approved Tech Prep sites completed the self-study/evaluation document. This document assists the Tech

Prep office in the site approval process and was modified to a user-friendlier format. The consortium has taken advantage of collaborative on-line teaching and learning software, allowing students to use the World Wide Web to create and participate in collaborative on-line learning communities. A postsecondary partners meeting brought together tech prep partners to develop ways to improve the tracking of secondary students to postsecondary institutions in our state. Based upon U. S. Department of Education recommendations, Kentucky developed and established 13 Tech Prep consortia sites in 2006. Tech Prep consortia sites are a combination of an average of nine high schools, three area technology centers, a postsecondary institution and several business and industry partners. The new consortium focuses on implementing major components of Tech Prep and meeting the Perkins III requirements. Kentucky is also developing a career pathway model to follow the Tech Prep student from secondary to postsecondary career technical training.

DISTRIBUTION OF FUNDS

During the 2006 fiscal year, allocations were calculated for 176 school districts. Allocations for five of these school districts were for middle school education only and the allocation was transferred to the local districts where those five districts' high school students attend school. Fifty-three area technology centers serving students from local school districts received Perkins funds. Twelve postsecondary institutions serving secondary students from local school districts in the geographical area received funding. The area technology centers use the same curriculum as the postsecondary technical colleges, facilitating the transition of secondary students to the postsecondary technical institutions.

Waivers were granted to districts that could demonstrate why they could not join a consortium and if there were sufficient funds to make improvements in the program. There were 11 waivers approved and 15 approved consortia.

Fifty-one percent of the 85 percent of funds to eligible recipients went to postsecondary institutions that offered technical education programs less than a baccalaureate degree. Forty-nine percent went to local school districts and area technology centers. This ratio was based on full time equivalent enrollment in preparatory programs, the amount of time spent in vocational education programs, and sufficient funds to make a difference. Kentucky chose not to set aside the 10 percent reserve in section 112(c)(1) but to allocate all of the funds through the formula process.

The formula for postsecondary technical education continues to be based upon the number of students enrolled in technical education programs who have received Pell grants or other financial assistance through the training agreements in the Workforce Investment Act. There are no students who receive assistance from the Bureau of Indian Affairs. The formula for secondary technical education is based on the number of individuals aged 15 through 17 who reside in school districts and the number of individuals aged 15 through 17 who reside in school districts and are below the poverty line.

The sole state agency calculates the allocation for each eligible institution and notifies the institution of the amount they can receive. The administrator of each school must then submit a local application for funding to be reviewed for approval. An example of the Local Application for Funding can be found on the KY TECH website: http://www.kytech.ky.gov/federalprogramslocalapplication.doc. The application includes information pertaining to advisory and evaluation committee members, programs and courses offered at the school, justification for funding requests, linkages of funding requests to performance indicators, budgetary breakdown of how funds will be spent, and a narrative section in which the school must describe how Perkins funds will meet specific Federal requirements. Eligible recipients were required to sign a Statement of Assurances to assure our agency they will comply with all Federal requirements and the funds received by the school will be used as identified in the approved Local Application. Information is regularly provided to state auditors. Monitoring of the expenditures of eligible recipients occurs through approval of budget changes, on-site visits, and technical assistance over the phone, through e-mail, and our internal accountability system to assure schools did not overspend their funding.

ACCOUNTABILITY

Both secondary and postsecondary schools met all performance goals with the exception of 4P2. Even though they did not meet this goal, they did show improvement. The exceptional performance shown by our schools this year can be attributed to several factors, but the most important being regular monitoring and technical assistance. During the 2006 fiscal year, our office produced monthly reports by school to monitor the progress of each school in meeting the performance goals. Technical assistance, by phone and on site visits, was conducted with any school whose data appeared to be incomplete. In conducting the visits, we discovered that communication problems existed between administrators, teachers, and clerical staff who enter Perkins data. Often information was received but not passed along to the proper person, resulting in data not being reported correctly, or in some cases, not at all. Technical assistance was conducted to assure that teachers were aware of the definitions being used for each accountability indicator. We also provided them with strategies for collecting data and getting it to the proper person for data entry. Workshops were provided across the state to assure that teachers and administrators were using the data system to review data entered on a regular basis and utilizing the information to increase student performance. The monitoring and technical assistance was the biggest factor in overall improved accountability results.

At the secondary level, the largest increase occurred in 2S1. This tremendous improvement can be attributed to the inclusion of “early completers” in the calculations. In previous years, there was no data system in place to track students who may have completed a technical program in the 10th or 11th grade. Our state reported only on 12th graders who completed a program and graduated from high school. During the past year, work was done to allow schools to submit data to our office for students who completed a program prior to grade 12. This process also assisted in improving overall numbers for 1S2 and 4S2. Several other factors contributed to the increase of students improving 1S1 and 4S2. These included state of the art technology purchases, 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 Tech Prep, and the availability of numerous workshops assisted teachers and school administrators to exceed the previous year's indicators.

Postsecondary schools showed the largest increase in performance in placement and retention results. This can be attributed to the agreement between our agency and the Kentucky Department for Unemployment Insurance to allow participating schools to match student social security numbers with employment information to determine if former students are employed and retained in their jobs. In previous years, schools relied only on employment surveys to determine placement. The response rate for surveys is traditionally very low and resulted in an inaccurate picture of each programs placement and retention results. The matching process proved very successful for postsecondary institutions, particularly the community and technical colleges.

Nontraditional completion was the only performance goal not met at the secondary and post secondary level, but Kentucky did show improvement, increasing completion rates for nontraditional secondary students by 8.35% and by 1.6% at the post secondary level The increase can be attributed to teachers and administrators working more diligently to assure that nontraditional students were treated fairly and equally in the classroom, increased awareness by students of high wage employment opportunities, and the inclusion of “early completers.” This work will continue. We are in the process of beginning a campaign within our school to recruit and retain nontraditional students with the assistance of former students who have completed programs in our schools and are very successfully employed in their chosen career field. Several nontraditional students in a variety of careers were interviewed about why they chose the career path they did and provide advice for others who are thinking about enrolling in CTE. These interviews have been made into promotional CD’s, posters and brochures that can be used at the secondary level. Hopefully, this strategy will assist us in improving nontraditional numbers.

Each of the special population student groups met at least three or four of the performance measures at the secondary level. All special population groups met 2S1, only LEP students did not meet 1S2, and only single parents did not meet 3S1. Students with disabilities did not meet 4S1 or 4S2. 1S1 appeared to be the most challenging as none of the groups met this measure. This can be attributed to modifications made to the on demand writing component of the Commonwealth Accountability Testing System, which is used to measure 1S1 for Kentucky. Data pertaining to special population students could not be obtained for 2S2. The assessment is administered and scored by another agency, the Kentucky Department of Education, Division of Career and Technical Education. The attempt to import results and demographic student information was unsuccessful. The results reported in the CAR are from summary reports generated by the administering agency. KDE was able to provide only scores by program, gender and race. At the postsecondary level, special population students performed extremely well, in many cases exceeding the statewide performance results. With the exception of Tech Prep, all special population students met or exceeded performance goals for 1P1, 1P2 and 1P3. Only LEP students did not meet 3P2, and only Tech Prep did not meet 1P1. Economically disadvantaged students, displaced homemakers, and Tech Prep students met 3P1. The majority of special population students did not meet 4P2, but most categories came close to meeting or exceeding the statewide performance.

We acknowledge that additional work needs to be done at both the secondary and postsecondary levels to enable special population students to increase their achievement levels during the 06-07 school year. A chart of the special population accountability results has been prepared by special population, by accountability goal, and by program for distribution. This information will be shared with schools and utilized by state program consultants. Teachers and program consultants will be asked to review current services provided to students and review instructional techniques currently used in the classroom. Strategies to assist teachers with improving student performance will be developed and implemented.

In order to assure continued improvement on performance goals, our agency will continue to analyze data by school and program to determine specific program areas or student populations needing assistance. Efforts will be made 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 was reported and that it was reported accurately. Strategies will be developed and implemented to assure increased performance in all accountability goals for next year. Schools will be encouraged to utilize data from the TEDS reporting system as an evaluation tool to improve instruction. Although all schools have the capability to generate reports specific to their school, program and student population, few actually do.

DEFINITIONS

At the secondary level, a vocational *participant* is any student who enrolls in one or two courses in vocational/technical program. A vocational *concentrator* is a student who is enrolled in the third course of at least a sequence of four courses leading to an occupation in technical education program. The sequence must have industry-validated standards leading to an occupation/career major. A vocational *completer* is a student who is leaving secondary education and completes four credits within the technical program and also earns a high school diploma. A *tech prep student* is defined as a student enrolled in a secondary/postsecondary course of study with unduplicated courses. The unduplicated course sequence must have industry-validated standards leading to a postsecondary credential in an occupation or career.

There are no *participants* at the postsecondary level. A vocational *concentrator* is a full-time student who has declared a technical education major and is enrolled in a sequence of courses leading to the completion of that major. These courses must have industry-validated academic and technical knowledge, as well as skill standards leading to an occupation or career in a one-year or two-year program. A vocational *completer* is a student who completes the requirements to receive a credential for the technical program. A *tech prep postsecondary student* has completed the secondary portion of the Tech Prep course of study and is enrolled full time in the unduplicated course of study for that program at the postsecondary institution. The unduplicated course of study is based on industry-validated standards and leads to a credential.

MEASUREMENT APPROACHES

The measurement approaches for the performance indicators were negotiated with the U. S. Department of Education. The data is housed in the Technical Education Data System (TEDS). Some placement data was obtained from the Kentucky Department for Unemployment Insurance. Nontraditional programs were identified by cross walking the programs to the national employment data of women and men employed in occupations with less than 25% of one gender.

The definitions used for each sub-indicator of performance at the secondary and postsecondary levels are listed below.

1S1 **Numerator:** Preparatory technical education students (seniors) who scored proficient/distinguished on the state assessment for writing/English.
Denominator: Number of preparatory technical education students (seniors) who took the state assessment for writing/English.

1S2 **Numerator:** Number of preparatory technical education seniors who satisfactorily complete the technical education program with four credits in a program leading to the employment sector and graduates from high school
Denominator: The number of preparatory technical education students who exit secondary education as a program completer and graduate, a leaver without graduating, and a transfer out of the technical education program.

2S1 **Numerator:** Number of preparatory technical education seniors who concentrated in technical education program and graduated from high school.
Denominator: The total number of preparatory technical education students who exited secondary education as a program completer and graduate, concentrators who graduated without completing the program and left without graduating.

2S2 **Numerator:** The number of technical education preparatory seniors who pass the state Skills Standards test.
Denominator: The number of technical education preparatory seniors who took the state Skills Standards test.

3S1 **Numerator:** Number of technical education seniors who completed the program and graduated from high school and were employed in occupations related to training, or employment in occupations unrelated to training, or enrolled in postsecondary education, or enlisted in military service, six months after graduation from program.
Denominator: Number of preparatory technical education seniors who completed the program, graduated from high school, and received a credential.

4S1 **Numerator:** Female and male technical education preparatory students enrolled in programs that lead to employment in occupations where employees represent less than 25% of one gender

Denominator: Total enrollment in technical education programs that have preparatory students enrolled and leads to employment in occupations that employees represent less than 25% of one gender.

4S2 **Numerator:** Male and female technical education preparatory seniors who completed high school and technical education programs that lead to employment in occupations that employees represent less than 25% of one gender
Denominator: Total number of technical education preparatory students who completed high school and technical education programs that lead to employment in occupations that employees represent less than 25% of one gender

1P1/ 1P2/ 2P1 **Numerator:** Preparatory technical education students who complete the technical program with a 2.0 GPA or above and receive a credential.
Denominator: Preparatory technical education students who leave program, transfer out of the program, and complete the program with a credential.

3P1 **Numerator:** Program completers who were employed in occupations related to training or employment in occupations unrelated to training, enlisted in military service, or continuing education or training six months after graduation from program.
Denominator: Number of preparatory technical education students who completed the program and received a credential.

3P2 **Numerator:** Number of completers retained in original placement or moved to another positive placement one year after program completion/ graduation.
Denominator: The number of preparatory technical education students who completed the program and were in a positive placement six months after program completion/graduation.

4P1 **Numerator:** Female and male preparatory students enrolled in programs that lead to employment in occupations that employees represent less than 25% of one gender.
Denominator: Total enrollment in programs that prepare individuals for employment in occupations that employees represent less than 25% of one gender.

4P2 **Numerator:** Male and female preparatory students who complete programs that lead to employment in occupations that employees represent less than 25% of one gender.
Denominator: Total number or program completers in the programs that prepare individuals for employment in occupations that employees represent less than 25% of one gender.

IMPROVEMENT STRATEGIES

We have worked diligently over the past six years to develop a data system, train users to input student information, develop summary reports and utilize the information to

improve instruction and achievement in career technical education programs. Improvements to user screens and summary reports are modified each year to make them more user friendly, import and rollover programs were developed and refined to eliminate the need for secondary institutions to enter student data into TEDS that had already been entered into a similar system, and programming was evaluated and revised to assure accurate calculations in summary reports. Our agency has collaborated with other state agencies to develop agreements allowing schools to import data from other data systems, cutting down on the amount of data entry that must be done at the school level. Yearly workshops have been conducted to train all users on system upgrades to assure data is input accurately and efficiently. On site technical assistance visits are conducted to familiarize teachers and administrators with definitions, report generation and data analysis. Data audits have been conducted 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. Although we are always looking for ways to improve the data collection and entry for Perkins reporting, we feel confident that the data input into the Technical Education Database System is accurate, reliable, and complete.

MONITORING FOLLOW UP

Kentucky did not receive a monitoring visit during the past program year. Kentucky was monitored during the 2004-2005 school year and all recommendations were addressed.

WIA INCENTIVE GRANT AWARD RESULTS

Kentucky received notification of eligibility to receive an incentive grant during the 2006 fiscal year. The application was completed by the three agencies: Office of Career and Technical Education, Office of Employment and Training, and Adult Education. The executive directors of the Office of Employment and Training and the Office of Career and Technical Education signed the Letter of Agreement in August, 2006. The attorney for the Education Cabinet approved the agreement for Form and Legality in August, 2006.

The funds will be used to (1) strengthen the integration of academics and applied academics with technical knowledge and skills required in current and emerging occupations; (2) expand Career Pathways for all eligible recipients that offer career and technical education; (3) expand distance learning opportunities for students; and (4) increase the rigor in career and technical education curriculum. Instruction material and aids will focus on academics, applied academics, and emerging technical knowledge and skills needed in business and industry will be used to supplement teaching and learning activities. To date, none of the funds have been expended.

SUMMARY

During the past year Perkins funds have provided professional development opportunities for instructors and administrators and purchased state-of-the-art equipment used in classrooms and laboratories. The administration has emphasized the importance of integrated academics and technical skills. Strengthening programs is a priority for the Office of Career and Technical Education and the agency has begun work to obtain program accreditation by the Southern Association of Colleges and Schools. If accreditation is obtained, the OCTE will be the only system of career and technical secondary schools in the country to be SACS accredited. Materials have been provided to all schools to utilize for nontraditional recruitment and retention. Professional development opportunities were expanded during the year, especially those that allowed instructors to upgrade their knowledge and skills on equipment being used in 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 develop an awareness of individual learning styles, and to become more effective in classroom management skills.

The implementation of 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 post-secondary 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 industry upon completion of the program.

Schools not meeting accountability goals last year were asked to submit improvement plans and on site assistance was available to assist them in meeting their accountability goals. For each accountability goal not attained during the current fiscal year, data will be analyzed by school and program to determine areas in need of improvement. This information will be shared with administration and teachers and plans of improvement will be developed. The Perkins coordinator in each school will monitor progress on the improvement plan throughout the school year. In addition, site visits will be made by central office staff, data audits conducted, instructional plans will be reviewed, and assistance provide to help schools meet their performance goals next year.

Professional development opportunities will continue to be expanded to assure instructors are knowledgeable about the latest equipment, software, and instructional strategies. Professional development workshops will continue to be provided to assist personnel at secondary and post-secondary institutions with special populations and gender equity initiatives. Equipment will continue to be updated to meet 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 assure that all students in our state receive a technical education of the highest quality available.

APPENDIX A
ORGANIZATIONAL CHART