

PART B: NARRATIVE PERFORMANCE INFORMATION (OHIO)

In 2007-2008, the Office of Career-Technical and Adult Education (CTAE) within the Ohio Department of Education (ODE) performed functions and provided assistance, services and products for the legislature, other state agencies, associations, 92 career-technical planning districts (CTPDs), 23 Tech Prep (TP) consortia, business/industry partners and colleges, among others.

A large portion of this work in FY2008 involved development of the Ohio five-year (FY2009-2013) plan for career-technical education in adherence to the Carl D. Perkins Act of 2006. In collaboration with the Ohio Board of Regents, the Office of CTAE at ODE was engaged in research and study; internal and external input and dialog, including five public hearings; and review by the Governor's office and the State Board of Education before submission. The Ohio Perkins IV plan was subsequently approved by the Ohio board of education and the USDOE, Office of Vocational and Adult Education.

The performance information in the five sections (state leadership activities, technical skill assessments, state and local program improvement plans, TP grant award) of this narrative were connected to Ohio's one-year transition plan (FY2008) with three overarching goals put in place during FY2008. These goals are: 1) Increase graduation rates; 2) Increase the number of students participating in rigorous curriculum; and 3) Connect the accountability system with performance for career-technical education (CTE). Among early impacts of these goals is a graduation rate jump from 92.81 percent in FY2007 to 93.38 percent in FY2008, agreement among state and local educators to add rigor to Tech Prep (TP) programs with the new Perkins IV plan of having all career-technical education (CTE) students in rigorous TP curriculum and strengthening of accountability in administrative rules that govern the system of Ohio CTE programs, including secondary workforce development.

1. Implementation of State Leadership Activities

a. Required Uses of Funds

Conducting an assessment of the vocational and technical education programs funded under Perkins IV

- Eighteen business/industry credentialing grants were awarded to schools/career centers to assist them with self-assessment of their program quality as they prepared for program accreditation alignment and student credentialing.
- While technical assessment was not one of the three USDOE-required performance indicators for 2007-2008, it is an important means to evaluation of program quality. Two initiatives addressed technical assessment. The Office of CTAE engaged in gathering baseline data and planning for data recalculations for 2008-2009, when technical skill and placement indicators will be collected and

compiled. This data will be shared with Perkins recipients for program reporting purposes.

- Support was provided to the Center on Education and Training for Employment (CETE) at The Ohio State University (OSU) to conduct an item analysis, primarily for content currency, on 40 CTE tests accessible through the Webxam on-line assessment system.
- Work began to establish TP program criteria in preparation for requiring all new CTE programs to meet TP quality standards and to transition all current programs to TP quality over the next five years.
- Perkins leadership funds were used to assist local administrators in securing appropriate program accreditations in critical workforce areas, which includes assessment of program quality processes.

Developing, improving, or expanding the use of technology in career and technical education.

- CTE-26 program approval applications, which authorize state weighted funds for CTE programs, were revised (January 2008). Of 430 CTE-26 applications submitted, 384 were approved for funding in FY2008. The applications require Perkins recipients to sign assurances that the local education agency (LEA) programs address “current and emerging technology” as required in the application assurances section and in Administrative Rule 3301-61-03, Section F (Criteria for Secondary Workforce Development Programs).
- In partnership with the Ohio Resource Center, an on-line resource was developed to provide educators with inquiry-based lessons based on Ohio career field technical content standards.
- Through a contract with Melior, Inc., and aligned with the National Automotive Technical Education Foundation (NATEF) standards, computer-driven modules were provided to assist teachers, including those in Transportation Systems (Automotive Technology) Career Field programs with materials, training and ongoing professional development. During the 2007-2008 year, 87 high school programs were served with 2,575 students completing 15,709 computer-based modules of study.
- Through Project Lead The Way programs in pre-engineering and biomedical science, students participated in computer-driven, problem-based learning. During the 2007-2008 academic year, Ohio supported over 150 programs and served 4,995 students.
- To facilitate use of the Ohio technical content standards, work began in collaboration w/Tech Prep on an on-line pilot that would allow teachers to download and customize sections of the Information Technology standards for their syllabi and lesson plans.
- Use of a student planning tool called the Individual Academic and Career Plan (IACP), launched on-line at the end of FY2007, was expanded in FY2008. In that school year, students in 530 Ohio high schools and 161 middle schools used the IACP with more than 825,000 logons.
- An ODE Web feature on a career center teacher using wikis, blogs, noodle tools and other technology in the classroom garnered nearly 2,500 Web visits in two weeks in June 2008 – more visits than any single feature story on the agency Web

site in FY2008. E-mail feedback indicated more teachers planned to use these tools in their classrooms.

Offering Professional development programs, including providing comprehensive professional development (including initial teacher preparation) for career and technical education teachers, faculty, administrators and career guidance and academic counselors at the secondary and postsecondary levels.

- Through Project Lead The Way (PLTW) and with the assistance of the postsecondary state affiliate, (Sinclair Community College), teachers and guidance counselors participated in initial (two weeks) and ongoing training specific to courses they are teaching and/or programs for which they provide guidance. During the summer of 2008 (some in FY2008), Ohio trained 160 teachers in seven content areas.
- Through Ford Partnership for Advanced Studies (FordPAS), teachers received ongoing training (meetings, classroom experiences, on-site state staff guidance) to assist with creating a 21st century skills, problem-based learning environment. During the 2007-2008 year, 67 teachers were trained, and 15 follow up on-site visits were made.
- Eighty teachers (40 per academy) were accepted to attend the 2008 College Tech Prep Summer Academies in June and July 2008. In addition to learning how Tech Prep programs are converting CTE programs to TP status to meet the goals of the Ohio five-year plan (Perkins IV), all teachers receive one-year access to the Blackboard on-line course on TP teacher preparation to provide multiple, repeated exposure to the learning. Identical sessions were offered in the summer of 2007.
- A CTE consultant provided leadership and oversight for High Schools That Work (HSTW). Ohio has 211 high schools and middle schools in HSTW and Making Middle Grades Work. Professional development emphasis was on multiple-session participation with follow up.
- For the fourth consecutive year, the Office of CTAE supported CTAE Leadership Ohio, a nine-month academy designed to enhance CTE leadership skills. In FY2008, there were 12 academy graduates in the program managed through OSU.

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 Office of CTAE supported seven start-ups and one implementation school representing major and small cities and rural demographics in the High School of Business Program in FY2008. The academy-style program emphasizes college-level courses in a project and problem-based environment to better prepare students to excel in a college business program.
- The Office of CTAE awarded 32 middle/high school improvement grants, two dropout prevention grants and two STEM grants – all addressing the integration of academics and CTE, professional development and partnerships to enable students to achieve state academic standards and CTE skills or complete programs of study.

- The Office of CTAE completed Ohio's technical content standards for the 16 career fields aligned with the National Career Clusters. The technical content standards are embedded with academic content standards and emphasize inquiry-based instruction, which was further reinforced during inquiry-based workshops conducted in collaboration with the Ohio Resource Center in FY2008.
- The Office of CTAE provided leadership and support for various components of the new Ohio high school graduation requirements called the Ohio Core (SB 311), especially the financial literacy requirement, which is offered through finance, business and FCS programs.
- State and local educators were engaged in FY2008 in planning for the adoption of Programs of Study (POS) by 100 percent of Ohio secondary CTE programs by the end of 2013. POS expand from Grades 9 to 14 and include both academic and technical coursework that culminates in postsecondary articulated credit and industry-recognized credentials, where applicable.

Providing preparation for non-traditional fields in current and emerging professions and other activities that expose students, including special populations, to high-skill, high-wage occupations, except that one-day or short-term workshops or conferences are not allowable.

- In FY2008, the Office of CTAE began compiling best practice resources (possible speakers and printed resources) in relationship to serving nontraditional students. Previous year (FY2007) data indicated a need for more females in the Ohio career field programs of Construction Technologies, Engineering and Science Technologies, Manufacturing Technologies and Transportation Systems and more males in Education and Training, Human Services and Health Science.
- The Office of CTAE, PLTW, joined six other states nationally to develop a new Biomedical Science, inquiry-based curriculum. The first course in a four-course sequence in four Ohio high schools was piloted with 76 percent of enrollment being female.
- Funds and leadership enabled the development of activities in a collaborative with 18 Ohio colleges and universities to engage girls in the traditionally male-dominated field of Information Technology and to plan ways to track the success of those activities in terms of enrollment in IT programs – both secondary and postsecondary. Beyond the single-day event, secondary and postsecondary faculty collaborate to discuss impact and expansion.

Supporting partnerships among local educational agencies, institutions of higher education, adult education providers, and, as appropriate, other entities, such as employers, labor organizations, intermediaries, parents, and local partnerships, to enable students to achieve State academic standards, and career and technical skills, or complete career and technical programs of study.

- More than 100 local educators served on teams and another 100 participated in public hearings to inform the Ohio five-year plan that was submitted to USDOE, Office of Vocational and Adult Education.
- In response to economic need, the annual CTAE Policy and Leadership Forum became the Ohio Economic-Education Summit. Under the leadership of the

Office of CTAE, collaborating partners for the summit were the Governor's office, Ohio Department of Development, Ohio Board of Regents, Ohio Department of Job and Family Services, Ohio ACTE, Battelle and KnowledgeWorks. Six hundred state and local leaders for education, business/industry and organizations participated in the summit that had a primary focus on replicable models of how education and business collaborate to help students and the economy.

- Partners for the FY2008 Ohio School Improvement Institute were the Ohio Board of Regents, Ohio College Tech Prep, High Schools That Work and the Career Education Association. This eighth annual institute, focused on transforming Ohio education, had 800 participants, primarily teaching teams that left the event with plans to implement/revise classroom strategies to help students better attain 21st century knowledge and skills.
- With the announcement (August 2007) that administration of Adult Workforce Education and Adult Basic and Literacy Education (ABLE) was moving from ODE to the Ohio Board of Regents (OBR), the Office of CTAE worked collaboratively to plan that transition to be as smooth as possible with minimal disruption of services.
- The Office of CTAE worked with OBR on two statewide credit transfer initiatives known as Career-Technical Credit Transfer (CT²) and Transfer Assurance Guide (TAG) and has a long-standing relationship with OBR on collaboration to deliver TP through the 23-member Ohio TP consortia.
- As part of Ohio Core (SB 311), the State Board of Education, in partnership with OBR and the Partnership for Continued Learning, convened a team, including CTE representation, to develop alternatives to the Carnegie unit for credit accumulation. Stakeholder input began in FY2008 with a target of completing the plan and submitting it to the legislature in FY2009.
- The Office of CTAE has ongoing collaboration, including for an annual legislative seminar (January 2008) with the Ohio ACTE, the Ohio Association of Career-Technical Superintendents and the Ohio Association of City and Career-Technical Schools.
- With input from CTAE, the State Board of Education completed research and a survey of business/industry partners and educators statewide to determine what Ohio students should know and be able to do in the 21st century. The Education in the Global Economy (EDGE) initiative included plans for further input on a "top 10" list of what students need.
- Among business/industry partners for PLTW were the Society of Manufacturing Engineers, Wright-Patterson Air Force Base, U.S. Army, American Electric Power, BioOhio, Lincoln Electric, General Motors, Chrysler Corp., Cleveland Auto Dealers, American Welding Society, Rockwell Automation, LuK USA, Timken Research Labs and Diebold. Business/industry partners for the Information Technology Career Field included Honda of America, American Greetings, Progressive Medial, Batelle, SARCOM and Interhack Corporation.
- Business/industry co-ops are an integral part of many CTE programs with, for example about 95 percent of all Marketing programs having a strong student-employer component to reinforce standards-based learning.

- Ohio's 2,125 Job Training Coordinator (JTC) students in FY2008 and their 113 coordinators have work-based learning partnerships with banks, hospitals and restaurants, among others.
- The Ohio career-technical student organizations have hundreds of business-industry partners who assist with writing and judging tests at state competitions and offer other CTE student and program support.
- Approximately 2,200 Ohio business/industry representatives, college faculty and high school educators assisted the Office of CTAE with input regarding the 21st century knowledge and skills needed in Ohio's career field technical content standards.
- Secondary and postsecondary educational leaders work collaboratively with local business/industry leaders and college access programs to align local regional economic development needs with educational programs through the 23 Tech Prep consortia structure.

Serving individuals in State institutions.

- The Office of CTAE earmarked one percent of the FY2008 Perkins dollars to support career education and training in the state's youth (Buckeye United School District, formerly called Ohio Department of Youth Services) and adult (Ohio Department of Rehabilitation and Corrections) correctional institutions. An ODE consultant, who visited each institution, provided targeted technical assistance, program development, evaluation and oversight, strategic planning, teacher education and licensure assistance and guidance on the appropriate uses of Perkins funds.
- In the youth system, 2,500 young people were served through 22 programs in seven facilities. These programs were evaluated on measures including student and staff attendance, nontraditional program participation, service to special needs students and student achievement. In the adult system, 2,334 men and women were served in 85 programs within 25 facilities. These programs were evaluated on measures including attendance, program completion, textbook currency and nontraditional program participation.
- The youth system received inservice and started incorporating the IACP, a 24-7 on-line planning tool for students, into the WFD program curriculum.

Providing support for programs for special populations that lead to high-skill, high-wage and high-demand occupations.

- The ODE Offices of CTAE and for Exceptional Children organized a statewide Task Force for Serving Students with Disabilities (SWD) in CTE in June 2007. Four committees addressed how CTE can better serve SWD and provide them opportunities in all CTE programs. The result was a guidance publication for serving SWD and IEP development as well as 10 meetings around the state to better inform educators about rules, regulations and best practices related to SWD in career centers. Approximately 500 people participated in the meetings. Subsequently, the Office of CTAE and the Office for Exceptional Children at ODE provided \$30,000 each (\$60,000 total) for a training grant to address the instructional needs of all learners including students with disabilities in CTE.

These two offices have committed to continued work together for the improvement of services and offerings for special needs students in CTE.

- The Office of CTAE maintained a CTE community schools consultant to serve as a liaison to monitor and provide assistance for CTE programs in the community schools. Of the more than 300 community schools in Ohio in FY2008, 65 of them had CTE-funded (GRADS, CBI, WFD) programs.

Offering technical assistance for eligible recipients.

- In FY2008, the Office of Career-Technical and Adult Education (CTAE) at the Ohio Department of Education (ODE) and the Ohio Board of Regents provided technical assistance to all Perkins recipients (92 career-technical planning districts, two correctional facilities, 23 community colleges, Branch campuses at 4-year colleges, 23 Tech Prep consortia, 40 adult full-service centers).
- IACP/Ohio Career Information System (OCIS) awareness, user and train-the-trainer sessions were conducted for 303 teachers, career coordinators, guidance counselors, school administrators and Department of Youth Services (DYS) transition officers from 140 school districts and organizations. The DYS, which serves incarcerated youth, was a new audience added in FY2008.
- A CTE consultant provided direction and leadership for the Ohio School Improvement Institute. The eighth annual institute drew around 800 middle and high school teachers, who worked individually and in teams to develop and revise strategies and activities for student improvement.
- One hundred teachers and supervisors with Family and Consumer Sciences and Career Paths for the Teaching Professions participated in on-line communications, training and technical assistance through Elluminate.
- For the sixth year, the Office of CTAE worked with other partners (Ohio Board of Regents, Battelle, KnowledgeWorks, among others) to conduct a leadership forum (February 2008) called the Ohio Economic-Education Summit. More than 600 high school/career center administrators, college faculty, state agency leaders and business/industry representatives participated with the objective of sharing and replicating examples of business/industry and education collaborative successes. Some local entities conducted regional summits modeled after the state event.
- The Office of CTAE supports technical assistance through the activities of the Ohio Association for Career and Technical Education and its divisions, including the annual state conference as well as for related groups such as the Ohio Career-Technical Administrators (OCTA), the Ohio Association of Family and Consumer Science Teachers (OAF CST), the Ohio ACTE Business and Information Technology division and the ACTE Marketing Education division.
- Office of CTAE Pathways Consultants conduct various workshops and one-on-one assistance for educators connected to Ohio's 16 career fields. This included inquiry-based, problem-based pedagogy to integrate real-life business/industry challenges into the classroom and beyond. For example, FY2008 technical skill updates in the areas of Automotive Technology, Electronics, Welding and Construction were provided to 150 teachers; and in Marketing to 120 teachers. Tech Prep Research and Development Grants were used to develop inquiry-based instructional units for secondary and postsecondary CTE programs.

- The Administrative Field Services (AFS) unit at ODE provided this assistance to the planning districts, adult workforce education and youth/adult corrections through paper, telephone, e-mail and face-to-face channels, including technical assistance visits, four each at spring and fall regional meetings and individual compliance monitoring. Topics included development of Programs of Study (POS); improving non-traditional student participation and completion; implementing assessment processes; facilitating grants management; assisting with locally developed five-year Career-Technical Education Plans (CTEP); guidance on other plans that address student academic and technical achievement and overall school performance; and information for other Perkins IV-specific compliance requirements. Comprehensive school improvement planning at the recipient level was supported using a Web-based planning, resource allocation and state/federal funding tool. A collaborative effort of ODE and OBR extends this and similar assistance to Ohio Tech Prep recipients and OBR to the community college recipients.
- The Office of CTAE staff in the Career Pathways, Programs and Services unit provided phone, e-mail, individual face-to-face meetings, regional workshops and technical assistance sessions related to the design and implementation of career-technical education high school workforce development, Career-Based Intervention (CBI) and Family and Consumer Sciences/Work and Family Studies. Much of this was designed around Ohio's 16 career fields (aligned with the national clusters) and the accompanying technical content standards that are embedded with Ohio academic content standards.
- The AFS Methods of Administration (MOA) Coordinator continued to provide technical assistance and compliance monitoring to Perkins recipients, including the facilitation of Title IX coordinator training by attorneys from the Office of Civil Rights, Cleveland Regional Office. In March 2008, nearly 200 participated in the two training sessions conducted in Cleveland and Columbus. Results from on-site reviews and implementation of voluntary compliance plans were compiled into the FY2007-08 biennial report submitted to the Office of Civil Rights in July 2008.

b. Permissible Activities

Improving career guidance and academic counseling programs.

- The revision process began on Ohio Administrative Rule 3301-68-01 (Criteria for Career Development Programs) to clarify definitions and emphasize personal learning plans (IACP) for students. This five-year rule is up for renewal in the spring of 2009.
- Two paper and Web-based resources – a guide to understanding the IACP and its role with OCIS and a resource guide for families – were created and distributed to teachers, counselors, career development coordinators and other educators. One message reinforced is that career guidance should be in all academic areas.
- Through Project Lead The Way (PLTW) and with the assistance of the postsecondary state affiliate, (Sinclair Community College), teachers and guidance counselors participated in initial (two weeks) and ongoing training

specific to courses they are teaching and/or programs for which they provide guidance.

Establishing agreements, including articulation agreements, between secondary school and postsecondary career and technical education programs to provide postsecondary education and training opportunities for students.

- The ODE and the OBR continued their work together on the Career-Technical Credit Transfer (CT²) initiative that facilitates statewide credit transfer among public high school career-technical, adult workforce and college/university education. In FY2008, statewide credit transfer began through the state-legislated CT² in the following seven areas: Information Technology-Networking, Automotive Technology, Electrical Engineering Technology, Mechanical Engineering Technology, Medical Assisting and Practical Nursing to Registered Nursing. By the end of FY2008, plans were underway for implementing seven additional areas: First Responder, Emergency Medical Technician-Basic, Emergency Medical Technician-Intermediate, Emergency Medical Technician-Paramedic, Volunteer Fire Fighter, Fire Fighter I and Fire Fighter II.
- CTAE supported the implementation of Transfer Assurance Guides (TAGs), which include the Ohio Transfer Module – addressing required and elective courses in general education courses and pre-major and major courses. Courses in a TAG are guaranteed to transfer from two-year to four-year schools and apply directly to the major. In its totality, the TAGs become a guaranteed pathway for students and are a very powerful advising tool for faculty and other advisors. There are 38 TAGs in eight specific discipline areas presently involving 6,500 plus courses. The TAGs are developed, approved, and monitored by Ohio's public institutions for higher education and are integrated in the Ohio POS model.
- The Office of CTAE, including TP, assisted OBR and the Governor's office with the process and selection of students for a new Seniors to Sophomores program that enables qualified high school seniors to take college-level courses with credit transferable to Ohio public colleges and universities. CTE program students were among the first recipients.
- During this Perkins IV Transition Year, work was completed to establish student and program standards for a Tech Prep Program with criteria implemented in FY2009. The standards expand articulated credit opportunities for students.
- A Program of Study (POS) template was completed. It includes an indication of what coursework is eligible for articulated credit, including CT², TAGS, AP, PSEOP, Dual Credit and Seniors to Sophomores credit. All CTE programs will incorporate a POS by June 30, 2013.
- The Office of CTAE supported electronic transcript collaborative with OBR to facilitate articulation.
- Work was completed to update EMIS to include the local reporting of students who successfully completed a course that includes postsecondary articulation.

Supporting initiatives to facilitate the transition of sub baccalaureate career and technical education students into baccalaureate programs.

- Ohio's POS template includes planning through the sub-baccalaureate (two-year college) level and may include 4-year degrees where applicable.
- The Office of CTAE supported two efforts stemming from the current Governor's strategic agenda called TurnAround Ohio -- the Ohio Skills Bank and Stackable Credentials.

Supporting career and technical student organizations.

- **Ohio's career-technical student organizations (CTSO)** are an integral part of overall student success – through accountability measured in competitions, through citizenship demonstrated in leadership activities, through multiple community service activities and through adult-to-student and peer-to-peer networking and support, including reinforcement of academic and technical content standards. A brief FY2008 overview from a state perspective is provided below for each of the CTSOs.
- **Ohio SkillsUSA** (31,778 members) – Around 850 students and advisors participated in the Fall Leadership Conference and 48 advisors attended the Chapter Management Institute. Of the 3,200 students who participated in regional and state (April 2008) championships, 183 advanced to national competition, June 22-27 in Kansas City, Mo., where 69 earned gold, silver or bronze medals. Ohio also had a national officer elected. Around 70 business/industry partners served as state competition judges.
- **Ohio FFA** (23,368 members) – A series of leadership programs, career development events, conferences and conventions served over 15,500 Agricultural Education students from the 23,368-member Ohio FFA organization. The 80th Annual Ohio FFA Convention (May 1-3, 2008) was conducted with nearly 6,500 student participants and more than 550 determined eligible to compete nationally Oct. 22-25, 2008, in Indianapolis, Ind. Approximately 185 Ohio business/industry representatives served as state judges.
- **Ohio FCCLA** (19,564 members) – Approximately 1,700 students participated in the Ohio Family, Career and Community Leaders of America (FCCLA) State Leadership Conference (April 16-18, 2008) at Ohio Exposition Center. Part of the activity included the distribution of more than \$35,000 in food and personal hygiene items to over 350 needy families. Ninety-five student competitors were selected to represent Ohio FCCLA in the national competition in Orlando, Fla., July 13-18, 2008. The national president is a student from Minster High School. About 100 Ohio business/industry representatives served as state judges.
- **Ohio DECA** (5,500 members) – The state competition (March 6-8, 2008) engaged 3,245 students. Approximately 450 Ohio DECA students and advisors were among more than 14,000 participants from the United States, Germany, Guam, Puerto Rico, Canada, and the Virgin Islands at the April 26 - 29 International DECA Career Development Conference (ICDC) in Atlanta, Ga. Rick Mangini, associate director in the state Office of Career-Technical and Adult Education, received DECA's highest ward of Honorary Life Membership – one of

four given nationally and one of only two Ohioans to have ever received this award. About 200 Ohio business/industry representatives served as state judges.

- **Business Professionals of America, Ohio Association** (9,767 members) – State conference was March 6-8, 2008, with 1,654 students. Based on state competition results, approximately 450 Ohio students and advisors from 74 high schools were among 7,100 at the May 6-11, 2008, BPA National Leadership Conference in Reno, Nevada. Ohio members brought home 48 awards among the “top 10” of competition categories. This included six in first place, two in second place and six in third place. Two Ohio students were elected to national offices. Nearly 2,100 members attended the Fall (2007) Leadership Conference. The officers are working to increase member participation in the Torch Awards program and to increase individual and chapter support for Special Olympics, the national service project.

Supporting public charter schools operating career and technical education programs.

- The Office of CTAE maintained a CTE community schools consultant to serve as a liaison to monitor and provide assistance for CTE programs in the community schools. Of the more than 300 community schools in Ohio in FY2008, 65 of them had CTE-funded (GRADS, CBI, WFD) programs.
- Under Ohio HB 119 (ORC 3314.087), secondary students served by charter/community schools have access to services provided by the Ohio CTE delivery structure of career-technical planning districts.

Supporting career and technical education programs that offer experience in, and understanding of, all aspects of an industry for which students are preparing to enter.

- CTE-26 program approval applications, which authorize state weighted funds for CTE programs, were revised (January 2008). Of 430 CTE-26 applications submitted, 384 were approved for funding in FY2008.

Supporting family and consumer sciences programs.

- Family and Consumer Sciences (FCS) are composed of high school and middle school courses that help students achieve optimal and sustainable living for individuals, families and communities; these courses are adapted to educational, business, social, economic, cultural, technological, geographical and political contexts.

The Office of CTAE expanded use of on-line communications and technical assistance through Elluminate with most users in FCS and with the Career Paths for the Teaching Professions.

- The Office of CTAE created new FCS Content Standards in FY2008. The standards, embedded with Ohio academic content standards, consist of a series of nine strands: Advocate a Healthy Lifestyle, Build Relationships, Demonstrate Personal Financial Literacy, Design a Career Blueprint, Become Consumer Savvy, Ensure Food Safety, Manage a Life Plan, Manage Personal Transitions, and Nurture and Care for Children.

- In FY2008, statewide teams of Family and Consumer Sciences teachers began cross walking the current test items for end-of-course assessments to the new content standards with plans for implementation in FY2010.
- Graduation, Reality And Dual-role Skills (GRADS), an in-school instructional and intervention program for pregnant and parenting students, served more than 5,000 students in FY2008. Professional development for 100-plus GRADS teachers and supervisors emphasized helping students receive the government assistance and filing tax returns. In FY2008, GRADS students received over \$5000 in support assistance.
- The Ohio Association of Teachers of Family and Consumer Sciences (OATFACS) sponsored a summer conference attended by more than 400 Work and Family Life and GRADS teachers and supervisors. The conference focus was on financial literacy training, technology, classroom management and state academically embedded content standards. OATFACS also sponsored five training sessions, focused on the new FCS standards, with 500 teacher participants.
- In FY2008, more than 500 FCS teachers received a 12-hour financial literacy training sponsored by state government.

Supporting partnerships between education and business or business intermediaries, including cooperative education and adjunct faculty arrangements at the secondary and postsecondary levels.

- Business/industry co-ops are an integral part of many CTE programs with, for example about 95 percent of all Marketing programs having a strong student-employer component to reinforce standards-based learning.
- Ohio's 2,125 Job Training Coordinator (JTC) students in FY2008 and their 113 coordinators have work-based learning partnerships with banks, hospitals and restaurants, among others.
- CTE supported replication and communicated information about CT and Tech Prep rigorous curriculum models in dual enrollment (students getting high school diploma and associates degree at the same time) and postsecondary enrollment options.

Supporting the improvement or development of new career and technical education courses and initiatives, including career clusters, career academies, and distance education.

- Ohio CTAE has developed a two- to four-year program of study in Energy Science that is meant to prepare students for transition to postsecondary education in a variety of alternative and renewable energy science fields.
- The new Agricultural and Environmental Systems Career Field Technical Content Standards have six pathways, including one in biotechnology that emphasizes 21st century skills in connection with plants, animals and food.
- Teachers have participated in on-going training in the area of Fuel Cell Technology and ODE conducts on-site visits to assist teachers in providing the problem-based learning in the content area. CTE has supported the

implementation of four programs in Biomedical Science at the high school level and two programs in Biotechnology in Engineering.

- The Office of CTAE awarded two STEM grants for the planning and implementation of replicable STEM models that engage students in rigorous and relevant learning experiences in STEM and increase the transition of high school students to higher education.
- The Office of CTAE supported seven start-ups and one implementation school representing major and small cities and rural demographics in the High School of Business Program in FY2008. The academy-style program emphasizes college-level courses in a project and problem-based environment to better prepare students to excel in a college business program.
- The Office of CTAE, PLTW, joined six other states nationally to develop a new Biomedical Science, inquiry-based curriculum. The first of a four-course sequence in four Ohio high schools was piloted with 38 students (76 percent female) in FY2008.
- Emerging technologies such as PLTW programming, fuel cells, biotechnology, nanotechnology and information technologies have been piloted in Ohio.
- Ohio Tech Prep will continue to develop dual credit programming building on several engineering program such as the Tech Prep College NOW program. College NOW offers the student the opportunity to graduate with a diploma while graduating simultaneously with an Associate Degree.

Awarding incentive grants to eligible recipients for exemplary performance or for use for innovative initiatives under section 135(c) (19) of Perkins IV.

- Ohio did not pool funds in FY2008.

Providing activities to support entrepreneurship education and training.

- Ohio CTE joined the Consortium for Entrepreneurship Education, which included participation in state and national entrepreneurship week that featured an Ohio CTE student.
- As a member of the Consortium for Entrepreneurship Education and the Ohio Entrepreneurship Coalition, ODE participated in activities related to National/Ohio Entrepreneurship Week (February 2008) with the Ohio Department of Development's Entrepreneurship and Small Business Division. This effort, with coordination support of the Office of CTAE, included an Entrepreneurship Expo and recognition of a CTE marketing student by the Lt. Governor.

Providing career and technical education programs for adults and school dropouts to complete their secondary school education.

- No funds were expended in this area in FY2008.

Providing assistance to individuals who have participated in Perkins-assisted services and activities in continuing their education or training or finding appropriate jobs.

- During FY 2008, adult workforce education providers delivered the necessary instruction for credential acquisition to upgrade, improve or generate new skill development for over 94,000 adults who participated in the system. This assistance includes guidance and career counseling, evaluation and assessments for success, financial aid and job placement assistance.
- The Office of CTAE supported two efforts stemming from the current Governor's strategic agenda called TurnAround Ohio -- the Ohio Skills Bank and Stackable Credentials.
- The Ohio Skills Bank is an effort to establish demand driven career pathways in critical workforce areas in each of the state's twelve economic development regions.
- The Stackable Credentials project is an effort to develop a system in which a learner can accumulate credentials that can convert to college credit and encourage learners to pursue lifelong work force education pathways.

Developing valid and reliable assessments of technical skills.

- The Office of CTAE provided funding for support and resources to the Ohio Master site for the Adult Workforce Education ACT/WorkKeys project. This site provides personnel and assistance via a "single point of contact" to the 40 full-service centers. This master site also served as a warehouse to distribute on-demand WorkKeys marketing and test materials to the various service centers around the state.
- A statewide workshop targeted to district test coordinators enhanced the use of the electronic technical testing system. Individual assessments continued to be modified in order to maintain item validity and reliability. Emphasis continued to be placed on the use of industry-recognized credential exams as a part of the state assessment system. Specific industry tests for selected programs were published in a master matrix of program information, which was available on the CTAE Office website.

Developing or enhancing data systems to collect and analyze data on secondary and postsecondary academic and employment outcomes.

- In response to requests from Joint Vocational School Districts (JVSDs), the Office of CTAE collaborated with the Office of Assessment and the Ohio Graduation Test (OGT) contractor to develop a process enabling JVSDs to receive more timely OGT score data from the OGT contractor for incoming grade 11 students. The intent of this efficiency effort is immediate assistance to students in need of remediation before subsequent test administrations.
- New data elements were added to the secondary Education Management Information System (EMIS). The placement data elements were totally revised in order to collect more refined placement data (whether student is employed, in postsecondary, etc.) as required for Perkins IV.
- A new secondary follow-up survey was developed, with local input, and published on the ODE Web site. All secondary schools were instructed to use the same survey, for consistency purposes.

- The Ohio Board of Regents began exploring data matching options with FEDES and other states to obtain more complete postsecondary placement (employment) data in the future.

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 Office of CTAE, in conjunction with six universities, completed the re-design of approved licensure programs to meet new performance-based, Ohio Educator Preparation Standards for both traditional (Route A) and industry-experienced (Route B) teachers. Grants from \$10,000 to \$192,000 were awarded to support programs to better prepare teachers with the knowledge, skills and capacity to instruct their classes in alignment with Ohio's 16 career field technical content standards. The re-design put in place a process by which each university has a minimum of four performance measures that will be documented to determine impact on students as required by the grants and to assist with NCATE reviews.
- The Office of CTAE and university representatives met regularly throughout the year to share information and work toward continuous improvement. Benefits of this networking in 2008 include: One university that developed an articulated associate degree program that enabled a Route B teacher to articulate a preparation program into an associate degree major – a process that is now being replicated by other universities; A university that invites school district administrators and human resource professionals to meet to review its process and forms, enabling a smoother transition for teachers new to the profession; and A university that invites already licensed teachers and counselors to be professional development speakers.

Supporting occupational and employment information resources.

- The revision process began on Ohio Administrative Rule 3301-68-01 (Criteria for Career Development Programs) to clarify definitions and emphasize personal learning plans (IACP) for students. This five-year rule is up for renewal in the spring of 2009.
- Two paper and Web-based resources – a guide to understanding the IACP and its role with OCIS and a resource guide for families – were created and distributed to teachers, counselors, career development coordinators and other educators. One message reinforced is that career guidance should be in all academic areas.

2. Progress in Developing and Implementing Technical Skill Assessments

The FY2008 year was spent defining the type of secondary assessment system to be developed and implemented over the next five years. All planning was done in collaboration between the ODE and OBR. Ohio secondary CTE assessment system emphasizes “Articulation through Assessment” in addition to other performance and program design goals. Following are the goals to be achieved through the use of the new assessment system and characteristics that the assessment system should exhibit.

- Data will be collected and reported for addressing federal and state performance measures.
- Data will be used by the CTE Office and Local School districts for purposes of program improvement.
- School districts may use the tests to complement the local system for assessing student performance.
- The assessment system should build secondary-postsecondary relationships including but not limited to having students matriculate with transcribed credit.
- Students should find added value through use of reports in communicating their success.

Secondary Assessment System Characteristics

- Tests will be designed to measure knowledge and skill attained in a career pathway.
- Both core and pathway knowledge and skills will be measured with these tests.
- There will be in place a graduated set of benchmarks for each test.
- Scenarios will serve as a basis for test item development. A panel of subject matter experts will decide the extent to which the test will use scenario-based questions.
- Test items should be designed to measure multiple cognitive levels of learning.
- Content validation will be established through reviews and ratings of items and item pool by subject matter experts (SME).
- Establishment of appropriate benchmarks scores will be accomplished using the modified Angoff rating procedure using the same set of SMEs. Where available, difficulty level data on test items will be made available in order to facilitate decisions.

3. Implementation of State Program Improvement Plans

- The FY08 Statewide Secondary Workforce Development Performance Report is published on the ODE Web site. It contains enrollment data, performance results for three indicators of performance, performance levels and whether levels are met. The report also contains performance results and enrollment data for each student subgroup.
- Ohio exceeded performance levels for all three FY08 secondary indicators of performance:
 - 1S1 (Academic Attainment—Reading/Language Arts) – 93.89% performance rate (State level was 85.00%)
 - 1S2 (Academic Attainment—Mathematics) – 92.09% performance rate (State level was 80.00%)
 - 4S1 (Student Graduation Rates) – 93.38% performance rate (State level was 73.60%)
- Therefore, Ohio does not need to submit an FY08 performance improvement plan.
- 1S1 and 1S2 – Disability Status students (individuals with disabilities) were least likely to pass the reading and mathematics assessments (69.04% and 61.55% respectively). Economically Disadvantaged students were the special populations subgroup next least likely to pass both assessments (89.74% in reading and 86.83% in mathematics). Black students had an 86.42% passage rate in mathematics. American Indian/Alaskan Native students, a very small population (36 students) had an 88.89% passage rate in reading.
- 4S1 – Limited English Proficient students (a small population, 106 CTE Concentrators Who Left Secondary Education in FY07) were least likely to graduate (88.68%). Graduation rates of all other student subgroups exceeded 90.00%.

- No trend data yet, as this is the first year of Perkins IV.

4. Implementation of Local Program Improvement Plans

- The FY08 local performance improvement plan form and instructions were developed and published on the ODE Web site. CTPDs are required to complete the form for all FY08 indicators that did not minimally meet 90 percent of the agreed upon local adjusted level of performance and to indicate what action will be taken in FY09 to improve percentages for those indicators as well as who will be responsible for the action plan.
- The FY08 CTPD Secondary Workforce Development Performance Reports are published on the ODE Web site. Each report contains enrollment data, statewide and CTPD performance results for three indicators of performance, performance levels and whether levels were met. The reports also contain performance results and enrollment data for each student subgroup. The CTPD reports on the Web contain data that is “masked” (no data when fewer than 10 students) in compliance with the federal Family Educational Rights and Privacy Act ([FERPA](#)). The unmasked CTPD reports were sent to individual CTPDs.
- Of 92 CTPDs, 89 exceeded performance levels for all three secondary indicators of performance.
- One CTPD did not meet the performance level for 1S1, but exceeded 90% of the level, so a performance improvement plan is not required.
- One CTPD did not meet 90% of the performance levels for 1S1 and 1S2, so a performance improvement plan is required.
- One CTPD did not meet 90% of the performance level for 4S1, so a performance improvement plan is required.
- There is no trend data yet, as this is the first year of Perkins IV.

5. Tech Prep Grant Award Information

The Tech Prep Consortia are funded based on size. Each small consortium received 3 percent of the total funds available. Each medium consortium received 4 percent, and each large consortium received 6 percent. The foundational goal for use of the funds for college Tech Prep is expanded, enhanced and equal access for all Ohio students to be successful through rigorous career technical education in a career pathway of their choice that will afford them the opportunity for family sustaining wages and personal goal attainment. Partnerships with other state and local initiatives and grant opportunities for supplemental funding are encouraged.

Current accountability measures through the CCIP (on-line system) have continued throughout FY2008.

FY08 Tech Prep - Federal Based Allocations

IRN	Title	Project Identification	SFY08 Allocations
062869	University Of Akron	062869-3ETC-2006	163,561.01
063388	Cincinnati State Tech & Comm College	063388-3ETC-2006	251,726.61
062976	Kent State University	062976-3ETC-2006	163,561.01
063099	University Of Toledo	063099-3ETC-2006	365,981.61
063156	Youngstown State University	063156-3ETC-2006	114,316.01
063289	Zane State College	063289-3ETC-2006	114,316.01
063297	Lorain Co Community College	063297-3ETC-2006	163,561.01
063305	Columbus State Comm College	063305-3ETC-2006	337,417.61
063321	Shawnee State University	063321-3ETC-2006	114,316.01
063339	Hocking College	063339-3ETC-2006	114,316.01
063347	Lakeland Community College	063347-3ETC-2006	163,561.01
063354	North Central State College	063354-3ETC-2006	163,561.01
063362	Sinclair Community College	063362-3ETC-2006	251,726.61
063370	Clark State Community College	063370-3ETC-2006	114,316.01
063404	Cuyahoga Community College	063404-3ETC-2006	251,726.61
063420	Stark State College of Technology	063420-3ETC-2006	163,561.01
063438	Terra State Community College	063438-3ETC-2006	163,561.01
063453	Jefferson Community College	063453-3ETC-2006	163,561.01
064345	Washington State Comm College	064345-3ETC-2006	163,561.01
064501	James A. Rhodes State College	064501-3ETC-2006	163,561.01
064527	Marion Technical College	064527-3ETC-2006	163,561.01
065763	Edison State Comm College	065763-3ETC-2006	114,316.01
070581	Rio Grande Community College	070581-3ETC-2006	114,316.02
			4,057,962.24
	This is for Federal Base only.		