

State of Michigan

**Carl D. Perkins  
Consolidated Annual Report**

Program Year  
July 1, 2011 – June 30, 2012

Michigan Department of Education  
Office of Career and Technical Education  
(Secondary)

and

Workforce Development Agency, State of Michigan  
Division of Education and Career Success  
Community College Services  
(Postsecondary)

## **Executive Summary**

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

### **State Administration (Section 121)**

#### **A. Sole State Agency and Governance Structure**

In Michigan, the State Board of Education (SBE) serves as the State Board for Career and Technical Education. There are eight elected members of the board, plus two ex-officio members: the State Superintendent, and the Governor. The Director of the Office of Career and Technical Education (OCTE), Michigan Department of Education (MDE), serves as Perkins State Director and provides oversight and coordination of all Perkins activities. OCTE also implements and monitors the secondary Perkins grants and provides technical assistance to secondary career and technical education programs. The SBE has delegated the administration of postsecondary funds to the Michigan Economic Development Corporation (MEDC), Workforce Development Agency (WDA). In WDA, the Director of the Division of Education and Career Success is responsible for Community College Services (CCS), which implements, oversees, and monitors Perkins grants to the community colleges within the state. The two offices work cooperatively to deliver services and state leadership activities to both secondary and postsecondary educators. The Office of Financial Management, MDE, prepares and submits the interim and final Financial Status Reports.

#### **B. Organization of Vocational and Technical Education Programs**

The Michigan secondary system includes 25 consortia which serve as regional planning areas. Career and technical education (CTE) programs are provided through local school districts (rural, urban, charter/magnet), intermediate school districts (ISDs), and area career and technical education centers. The secondary system is further divided into 53 Career Education Planning Districts (CEPDs), which, in most cases, parallel the ISD boundaries. Although the intended purpose of CEPDs is to facilitate regional planning, they play a significant role in the collaborative delivery of career and technical programs and services at the secondary level. The secondary system also serves as a conduit for the delivery of some adult-level career and technical education programs and services for students less than 20 years old who have not completed high school.

The postsecondary institutions offer certificate programs and associate degree programs and courses, including customized training for updating occupational skills and competencies. The postsecondary institutions consist of the 28 public community colleges, four public universities, which are approved by the State Board of Education to provide occupational education services in their regions, and one tribal college.

In an effort to lead major career-related educational initiatives forward, the MDE continues to build strategic partnerships based on delivery systems that parallel the Workforce Investment Act's (WIA) Workforce Development Board (WDB) regions. To facilitate strategic planning, it is important that key education programs be similarly aligned geographically and organizationally with job training and workforce development activities. The MDE, OCTE, uses an application process that follows the same regional planning structure used for the WIA. The WDA, CCS, uses a comprehensive web-based application and reporting system that incorporates the long range and annual application components. The college regions are based upon the legal districts of the institutions and their related service areas.

Secondary long-range plans for 2008-2013, as well as annual local applications for 2008 through 2013, are required to be developed in alignment with WDB planning. The postsecondary institutions work collaboratively with their local advisory boards and agencies. Working together strengthens collaboration, reduces competition, and increases the influence of educational agencies.

Michigan has continued to organize secondary state approved programs by the sixteen (16) National Career Clusters adopted by the SBE. The National Career Clusters have been employed as the minimum state standards for CTE programs in Michigan and all programs have been aligned to the appropriate cluster, as well as additional technical standards recognized by business and industry.

Michigan has developed and expanded CTE resources that are housed on a web-based portal: <http://navigator.mccte-fsu.org/>. The **Navigator** system provides real-time access to Michigan's state-approved CTE program standards and includes a crosswalk to the Michigan Academic Standards, Michigan Career and Employability Skills, and Michigan Technology Standards. This year, Michigan expanded the system to include academic alignment to the Common Core for Math and ELA and the documentation of academics being delivered through CTE programs. The online database can be used for managing the technical standards, career cluster content, content delivery (course segments), and local district academic alignment results for all of Michigan's CTE program areas. The cyclical review and revision of current CTE standards and new curriculum resources is conducted using a web-based process and includes secondary and postsecondary instructional staff, as well as business and industry representatives.

Approval for new secondary CTE instructional programs takes place annually. During the 2011-12 school year, OCTE approved approximately 85 new CTE programs, with continued growth in Science, Technology, Engineering, and Mathematics (STEM) and Information Technology. As a result of local interest, business and industry inquiry and potential job growth, OCTE staff brought together secondary educators, administrators, community college, and other postsecondary partners to work with industry representatives to develop a secondary program in the area of Mechatronics. This program had strong support from all and has been articulated with several sites to encourage a seamless transition for students and they enter the work of work and seek further training at the postsecondary level. The MEDC has also responded to the need to increase training in Mechatronics and is working with several community colleges in the metro Detroit area to build student interest and industry involvement.

In 2011-12, 26 Less-Than-Class-Size CTE programs operated in the state for districts or regions that do not have sufficient enrollment to run a full program in the high school setting. These are programs delivered through contracted instruction with business and industry.

In 2011-12, CCS approved six new programs in five community colleges. These new programs met the state criteria for high skill, high wage, high demand occupations, as well as employment demand and demonstrated student interest. Approximately 44% of occupational programs are state approved.

## **1. Implementation of State Leadership Activities (Section 124)**

### **A. Required Uses of Funds**

#### **Conducting an Assessment of the Career and Technical Education Programs Funded Under Perkins IV**

##### ***Secondary***

The Career and Technical Education Information System (CTEIS), is a web application server driven database and hosts an individual student record system. The CTEIS is used to collect data on students in CTE programs and includes statewide, regional, and district-level performance outcomes. The CTEIS also has secure collaborative applications that allow sharing of data, information, and ideas between OCTE and districts, industry partners, and vendors. The collaborative tools are used for assessment and program specific tasks such as sharing student assessment data with district staff to validate, change, or update specific student identification information. The data collected in CTEIS allows us to systematically process state data to report measures for each special population group and to evaluate outcomes on each of the core performance indicators, as well as within specific CTE clusters, pathways, Classification of Instructional Program (CIP) codes, and programs.

Cluster, pathway, CIPs, and program specific information enables OCTE to target and focus technical assistance efforts at the regional, CEPD, and district level. In addition, local educational agencies (LEA) maintain CTEIS data specific to the programs they operate. This enables them to specifically analyze data to the teacher, course, and student level to provide appropriate interventions for students, including those who are members of special population subgroups, who may be performing below the state performance levels. Individual student data provided to the state by each local educational agency (LEA) is reported at the aggregate level to and for each district, fiscal agency, CEPD, region, and the state (including by special population categories) to aid in data analysis and evaluate performance at the local levels.

Another means of assessing funded programs is through the onsite monitoring of 20% of the 25 CTE regions each year. Based on a five year cycle, visits are made every year to recipients of Perkins funds to ensure compliance with state and federal laws in the areas of grant activity, submission of complete and accurate data, financial recordkeeping, and building level instructional program review. Additionally, *Risk Analysis Factors* are used to determine if it is necessary to perform an out-of-cycle targeted visit to any regions. During the Technical Review, Assistance and Compliance (TRAC) onsite monitoring process, for 2011-2012, five of the 25 Perkins regions were monitored for compliance with Perkins statutes, state laws, and policy. In addition, one of the regions was selected for an out-of-cycle targeted visit. All non-compliance findings required corrective action as identified in a Compliance Plan submitted to, and approved by, OCTE.

Prior to each onsite visit, OCTE conducted a desk audit to determine "problem areas" for the regions to be visited, including review of such documents as core performance indicator (CPI) data, budget recaptures, single audit reports, previous end-of-year reports, and MDE information regarding districts with CTE programs that did not make adequate yearly progress under the *Elementary and Secondary Education Act* (ESEA). The desk audit also included a review of local district CTE Program Self-Review Reports and improvement plans, whereby each region reviews a minimum of 20% of its state approved CTE programs and submits an annual report and improvement plan of corrective measures. Technical assistance is provided onsite, or in follow up communication, to assist the regions in any weak or noncompliant areas identified by the state or the region staff.

Michigan continued to monitor participating agencies for compliance with federal nondiscrimination legislation (Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, and the Boy Scouts of America Equal Access Act of 2001) to ensure opportunities for all students. During 2011-2012, ten agencies were reviewed, including one community college.

The MDE has an internal monitoring coordination team. Membership includes representatives from all offices that administer federal grant funds and conduct monitoring visits. The team shares projected onsite monitoring dates and schools to avoid duplicate visits or to streamline monitoring. Future plans are to share common monitoring findings across federal programs to inform statewide technical assistance needs and to find ways that offices can collaborate on financial/grant management training to schools to minimize future findings.

### ***Postsecondary***

Each year, CCS schedules eight compliance and technical assistance visits with the community colleges. During these visits, CCS discusses with the college the methods used for the evaluation of its occupational programs. The outcomes from the evaluations are reviewed by CCS staff for impact on the CPIs and the effectiveness and impact on student success. Additionally, each program evaluation includes feedback from students, faculty, administrators, and advisory groups. While eight colleges are reviewed on an annual basis, all colleges need to keep their online Program Evaluation Inventory current, indicating when programs are slated for evaluation during a four year cycle.

Data is collected via a web-based system (MCCNET) and is used to collect the core indicator data by individual program within each community college, four universities, and one tribal college. CCS uses these data to assess how well special population groups are doing as compared to total occupational students. This program-specific information allows CCS to focus technical assistance efforts at the program level based upon analyses of the data. Colleges are provided historical data for each of the core indicators as well as whether or not they have met the 90% threshold. Those that did not meet the 90% threshold, did not show improvement, or did not meet the standard were asked to modify their plans, accordingly; to better focus on those programs that did not meet or exceed the expected levels of performance. Data is aggregated to the state level (including special population categories) and reported back to the colleges to aid data analysis and assess performance.

CCS upholds the support of its Michigan Community College Data and Evaluation Committee (MCCDEC). The MCCDEC meets four times a year. The primary function of the MCCDEC is to advise CCS in all matters pertaining to data collection, reporting, and analysis, including local and statewide evaluation. MCCDEC began the process of reviewing current evaluation processes used by the various community colleges in order to possibly standardize evaluation methods throughout the state. The core indicators are central to this process. MCCDEC also reviewed all the core indicators last year (especially 1P1 and 2P1) in order to provide insight for the state as to why certain discrepancies occurred and why others may or may not have attained the expected level of performance. Recommendations were provided, instructions were updated, and some colleges re-ran and re-submitted their data based upon MCCDEC clarifications and recommendations. The committee also provides information regarding best practices for program and service improvement.

## **Developing, Improving, or Expanding the Use of Technology in Career and Technical Education**

### ***Secondary***

Rapidly developing technologies are transforming the world and CTE programs. Highly technical, knowledge-based careers of the future are where current students will find jobs. Michigan has a process for encouraging local agencies to look to the future in delivering CTE. In 2011-12, one new and emerging CTE program was approved in the Finance Cluster - Insurance and Financial Services. All state-approved CTE programs are required to have an active advisory committee of technical experts from local business and industry. These members provide valuable feedback on current technology training needed in CTE instructional programs.

### ***Postsecondary***

The TRENDS in Occupational Studies Conference continues to provide a means for colleges to learn about the latest research, technology, and innovations in CTE. The 2011 TRENDS conference was held at the Grand Traverse Resort and Spa in Traverse City, Michigan. More than 469 faculty, administrators, and counselors participated in the conference, with nearly 99 separate workshops. Keynote speaker, Elliot Masie from The Learning Consortium addressed "Changing Workforce, Changing Workplace, Changing Learning, Changing Opportunities", while Katherine Lagana, Vice President of Global Product Development at LexisNexis spoke on "Tomorrow's Workforce: The Call for Change, Skill and Disruptor Talent". Mr. Masie's presentation focused on how society will face the future of employability in the midst of dramatic changes in how we work, the workplace, and the workforce. Ms. Lagana discussed the need for expertise when hiring in the business, technology, and trade industries. Her presentation focused on what would happen after students graduate from college but do not possess entry level skills based on their degree, prior job, or internships. How would those students stand out and present themselves so that they could be hired or be worth companies investing in them. Participation by vendors at the conference allowed educators to see and experience new and available opportunities in the field of technology and other occupational career fields.

CCS staff, as well as faculty and administrators on community college campuses, attend the annual Career Education Conference and a variety of specialized workshops on current trends and practices to enhance and improve their knowledge and technological skills in the classroom. CCS staff also actively participates in the routinely scheduled meetings of nine community college administrative organizations as regular guests and presenters to

update members on current federal and state policies and procedures which govern the administration and implementation of occupational programs.

### **Offering Professional Development Programs, Including Comprehensive Professional Development (Including Initial Teacher Preparation) for Career and Technical Education Teachers, Faculty, Administrators, and Career Guidance and Academic Counselors at the Secondary and Postsecondary Levels**

#### ***Secondary***

During 2011, MDE organized a professional learning workgroup to review and update its professional learning policy and standards. The resulting guidance document outlines quality indicators of professional learning and the roles of various stakeholder groups in designing, implementing, and supporting high quality professional learning. CTE professional development activities are being designed with the revised standards and quality indicators in mind.

Michigan requires that all CTE programs be taught by teachers with appropriate teaching certificates to receive funding. CTE curriculum consultants work continuously with the MDE Office of Professional Preparation (OPPS) to update teacher preparation standards in CTE areas, as well as to assist revising requirements for CTE certification and work experience rules.

Two teacher education preparation grants were awarded to two public universities that prepare and recommend high quality pre-service students for vocational certification. These institutions also provide support to practicing teachers through inservices, conferences, and other training opportunities in cooperation with state staff. This year, grant requirements included the recipients' presentations of outcomes and information at the Michigan Career Education Conference or a related professional development program. Evaluations generated by these activities were excellent. Conference attendees and grant recipients appreciated the exchange of information and ideas.

Comprehensive professional development was provided on an ongoing basis to administrators through OCTE state meetings, including the Fall OCTE Update, the Winter Perkins Grant Dissemination and Data Quality workshop, and the Spring OCTE Update meeting. Attendance has been consistently strong and reflected collaborative efforts between secondary and postsecondary partners. OCTE staff provides support and works closely with counselor professional development associations to assure that ongoing professional development is provided to school guidance counselors. During 2011-12, OCTE worked with the counselor professional associations to support their Fall and Spring conferences, including issues related to earning academic credit in CTE programs, the Michigan College Access Network, and the counselor certification. Staff also works in collaboration with the Michigan Occupational Special Populations Association (MOSPA) and multiple program specific teacher associations.

The Michigan Comprehensive Guidance and Counseling Program is currently being revised by the Michigan School Counselor Association. In addition, the counselor listserv is frequently used to disseminate national, state, and/or local information to counselors.

Throughout the year, state staff collaborates with CTE professional organizations and CTE teacher organizations to provide comprehensive professional development at statewide conferences, through website resources, summer institutes, and program specific curriculum development events. Through a state leadership grant, the Michigan Center for Career and Technical Education (MCCTE) provides expertise and services in:

- Locating and evaluating national and industry standards relevant to and related to high-quality CTE programs and CTE curriculum development
- Developing and managing a web portal that disseminates information to state CTE programs about state-approved program standards, CTE curriculum resources, and CTE program evaluation tools
- Facilitating CTE program-improvement technical assistance
- Providing state-of-the-art communication and training capacity

OCTE continued to work closely with the Michigan Career Placement Association (MCPA) to coordinate statewide work-based learning sessions for the 2011-12 school year. Support was provided through attendance at MCPA Executive Board meetings and providing technical assistance and resources to this association specifically related to work-based learning for students in state approved career and technical education programs.

The *Administrative Guide for Career and Technical Education in Michigan*, designed for use by CTE administrators, includes resources and information targeted for use by those filling this role. This guide includes an explanation of the appropriate use of secondary Perkins funds, a variety of resources, and gives detailed requirements for approved career and technical education programs. The document can be reviewed on the OCTE website: [www.michigan.gov/octe](http://www.michigan.gov/octe). It is continuously updated to reflect current initiatives, policies, and procedures.

The Michigan Conference on Career Education continues to provide a statewide forum for over 600 educators, administrators, counselors, and business partners. The 2012 conference theme, *Career and Technical Education: Learning that Works for Michigan*, emphasized the shared goals of educators and other stakeholders to help students acquire necessary academic and technical skills, while helping them to understand how and why these skills are relevant for students in their future careers and in support of the Michigan economy.

Professional development is a continuous effort involving all staff in the OCTE. On an annual basis, professional development is provided to new and current CTE administrators, new CTE teachers, teachers of specific career clusters, data staff, grant administrators, counselors, and special populations coordinators. OCTE promotes professional development through career and technical student organizations and professional associations affiliated with each career pathway.

In partnership with the U.S. Department of Labor, Office of Apprenticeship, OCTE supports formal, long-term education and training commitments. Apprenticeship programs are federally recognized with business occupational registered standards and signed apprenticeship agreements that outline education and training activities, timelines, and wages. The apprenticeship initiative was formed to assist in addressing specific program barriers with the goal of increasing apprenticeship opportunities throughout the state. OCTE staff meet with representatives from the statewide apprenticeship group to strengthen communication and linkages.

### **Postsecondary**

In addition to the technical assistance described in the above section, CCS provides Curriculum, Assessment & Evaluation, and Professional Development (CAP) Leadership Grants. These grants subsidize the cost for occupational faculty, career guidance, academic counselors, and occupational administrators to participate in activities that allow them to stay current with the needs, expectations, latest technology, and methods of industry. In addition, special professional development services are provided through consortium projects for Michigan apprenticeship instructors and coordinators through the Michigan Educator's Apprenticeship and Training Association (MEATA) annual meeting and special population coordinators and advisors through the postsecondary education participants in the MOSPA annual and special meetings.

### **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**

#### **Secondary**

Annually, OCTE provides a variety of technical assistance activities and guidance on the National Career Cluster standards and the academic standards embedded within CTE program standards. Teachers are asked to complete a gap analysis of their curriculum against the state CTE and academic standards. This process helps local districts assess strengths and weaknesses in the local curriculum to strengthen the CTE program of study. This will ensure quality programs for students using employer endorsed national technical standards, as well as a focus on the academic content that may be earned within those programs.

Each year, OCTE awards two Excellence in Practice (EIP) Awards. The *Career and Technical Education Program Excellence in Practice Award* recognizes successful, exemplary state-approved CTE programs that demonstrate outstanding outcomes, produces measurable results, and leads to documented success in employment or postsecondary education/training. The *Career and College Readiness Initiative Excellence in Practice Award* recognizes outstanding practices, programs, or services that demonstrate exemplary support of career/college planning for students (that include their interests, abilities, and skills), promotion of high academic expectations, and linking secondary course taking (including CTE) to preparation for postsecondary education and careers. The EIP Awards are awarded annually at the Michigan Career Education Conference.

Many Michigan CTE students have expanded their learning while still in high school due to the opportunity for dual enrollment in postsecondary institutions in academic, as well as occupational, coursework. Dual enrollment legislation has recently been revised to allow students in grades 9-12 to participate and to take up to 10 college courses before leaving high school. OCTE provides guidance to secondary and postsecondary partners to refine and develop articulated programs for students to have a seamless transition from secondary to postsecondary, as well as help with utilizing resources so that programs are available to more students. OCTE is able to report that each year more of the secondary CTE programs in Michigan have articulated agreements with the community colleges.

Michigan is implementing the Common Core State Standards and participating in the Smarter Balanced Consortium. Recently, the Michigan Legislature passed teacher tenure reform laws and a teacher/administrator annual evaluation based in part on a student academic growth model. These initiatives provide added attention to the integration of academics and CTE to improve student performance and to add relevance and meaning to the high school instructional experience.

To remove barriers to curriculum integration, Michigan has developed guidelines for awarding academic credit through CTE, humanities, and other courses. Governor Rick Snyder, State Superintendent Mike Flanagan, and the Michigan State Board of Education support flexibility in education, with rigorous expectations. School districts are encouraged to provide opportunities for students to receive rigorous instruction "any time, any place, any way, and any pace" and to move away from traditional courses and seat time measures.

New and emerging high school programs such as mechatronics, pre-engineering, alternative energy, and other STEM areas have begun to expand. School districts continue to be interested in starting Early/Middle Colleges. These schools are unique in that they are five year programs that require a three-way partnership between

secondary, postsecondary, and business and industry. Students earn a high school diploma and an associate degree or certificate upon completion. Twenty-three new early/middle colleges have started in Michigan since 2006.

### ***Postsecondary***

CCS continues to support and market early college opportunities through the various programs that support articulated credit, dual enrollment, and direct credit in postsecondary institutions in academic and occupational course offerings. In support of this effort, CCS developed and piloted the Michigan Community College Programs of Study (POS). CCS developed POS in 2009 to support the student success initiatives at the college. The program provides colleges the opportunities to assess and align the required technical and academic competencies and assessments between secondary and postsecondary institutions. A ten step process was developed by CCS to assist colleges in developing their program's content specialty for the POS. The outcome of the POS will result in the college identifying the prerequisite academic skills, knowledge and courses necessary for students to enter and succeed in a postsecondary program. The results of the study will also include a sequence of content and learner outcomes and courses that assist students to achieve a certificate, associate degree, and/or transfer to a four-year institution.

In 2011-12, 14 programs at six community colleges participated in POS. In 2012-13, POS will explore opportunities for community colleges that have completed POS in Automotive Technology to participate in a pilot initiative to develop a statewide articulation agreement between colleges. The process will allow specific community college's career and technical programs to follow a process to articulate occupational college courses with similar college courses across the state, thus giving students' options to attend similar postsecondary career technical programs with no loss of credits or repetition of course work.

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

#### ***Secondary***

Michigan employs an equity education consultant to facilitate and support continued advocacy for increased enrollment in nontraditional CTE programs. Perkins nontraditional program areas have been identified, reflecting current state program CIP codes and labor market changes. During the OCTE Civil Rights compliance reviews, data analysis and monitoring protocol includes access to programs for nontraditional students. OCTE houses the MDE Title IX coordinator, who provides resources to LEAs.

The Michigan Breaking Traditions Award program provides an avenue to recognize and encourage student achievement in nontraditional training and provides role models for other students considering a nontraditional career. In 2011-2012, 26 outstanding Michigan secondary students pursuing nontraditional training were recognized. Parents, teachers, counselors, and students joined with the OCTE staff to recognize the unique achievements of these students.

#### ***Postsecondary***

Support was continued for preparation of students for nontraditional training and employment and for programs leading to high-skill, high-wage, or high-demand careers. This has become criteria for state approval of occupational programs. The CAP grant allowed community colleges to undertake activities, beyond those under the basic grant that would increase nontraditional enrollment and completion. Special population coordinators reviewed assessment procedures and examined strategies for enrolling and retaining special population students in nontraditional career areas. CCS continued to provide direction and support for the Michigan Postsecondary Special Populations Council (MPSSPC), which provides leadership and opportunities for collaboration. Workshops are designed for the improvement of student success within the community college system. Additionally, the MPSSPC affords Special Population coordinators opportunities for professional development and the sharing of strategies in the development, administration, delivery, and advocacy regarding the Perkins/special populations grant.

### **Supporting Partnerships to Enable Students to Achieve State Academic Standards and Career and Technical Skills or Complete Career and Technical Programs of Study**

#### ***Secondary***

The closest partners to achievement are within MDE offices that work on school reform, school improvement, and academic assessment. OCTE also works closely with many external partners to promote positive learning opportunities for students. Some of those partners include the Michigan Occupational Deans Administrative Council (MODAC), the MEATA, the Michigan Apprenticeship Steering Committee, and many professional associations that support CTE teachers. OCTE works in coordination with these partners to assure that students are adequately supported for success in rigorous academic standards and the completion of grades 9 through 14 POS.

OCTE continues to update the *Green Initiatives and CTE* website to include a variety of STEM grant funding opportunities, resources leading to renewable energy careers, and community colleges' role in preparing students for the "Green Workforce". The OCTE Director and STEM consultant continue to serve on the State Green Partnership

Team to locate various opportunities, industry trends, and workforce development programs in the Green and Energy Efficient Industries.

The Advisory Committee Tool Kit contains information that was put together to help facilitate communication and avoid pitfalls that can occur when working with business and industry. This publication contains guidelines and recommendations for secondary CTE Program Advisory Committees as they work to improve CTE programs. The Tool Kit contains common definitions, a general process to follow, and issues to consider to make the best use of these community, business, and industry resources. The Tool Kit is available electronically on the OCTE website.

OCTE created and updated a Parents as Partners Toolkit for many years and housed it on the OCTE website. Last year, the information in the toolkit was merged with that of the MDE parent site. There is one main place on the MDE website for parents, schools, and districts to access information and research resources. The site is called *Collaborating for Success*—Parent Engagement Toolkit. The site is also offered in Spanish and Arabic. [www.michigan.gov/mde](http://www.michigan.gov/mde).

### ***Postsecondary***

Members of CCS actively attend educational advisory groups addressing the needs for collaborative relationships between the colleges, community members, and local business members. CCS, through its relationships with its sister administrative agencies in other state departments, also continues to support different events that bring together education, business, and local communities such as the Governor's Education Summit and the Michigan Breaking Through Learning Network. CCS continues to showcase "Best Practices" that focus on innovative and creative ways to bring education, community, and employers together through exemplary programs especially sponsored or supported through the Perkins Act initiatives and practices. Some of these "Best Practices" can be found on the MCCNET website.

### **Serving Individuals in State Institutions**

Michigan serves incarcerated youth through the Department of Human Services' Bureau of Child Welfare Funding, Contracting and Juvenile Programs. The Perkins grant funded one staff position that assisted students enrolled in CTE programs in Maxey Training School. Michigan also awarded Perkins funds to the Michigan Department of Corrections (MDOC) to serve incarcerated adults. The Perkins grant enabled the MDOC to emphasize program improvement by supporting curriculum redesign efforts, buying textbooks, equipment, and supplies at various correctional facilities, and providing professional development opportunities for CTE staff.

### **Providing Support for Programs for Special Populations That Lead to High Skill, High Wage, and High Demand Occupations**

#### ***Secondary***

The State Superintendent and the SBE have examined student performance data and have resolved to place a focus on the achievement gap that exists for historically disadvantaged students – particularly African American males. To that end, MDE is creating a comprehensive, coordinated strategy to eliminate the achievement gap that supports districts and schools and establishes regular measurements to monitor progress locally and statewide. The goals include: expose the racial achievement gap and the systemic factors that perpetuate it, explore courageous conversations about race in ways that will engage, sustain, and deepen authentic understanding and meaningful action, and cultivate a statewide framework that will enable each stakeholder to depart from the status quo.

OCTE will be implementing strategies that focus on African American males, but also that promotes the same equity for all special populations groups. School professionals that work with special populations will receive support through state-sponsored technical assistance and professional development activities, MOSPA sponsored workshops, and seminars for student support personnel within local programs. Through Michigan's Comprehensive Guidance and Counseling Program, students received assistance in career assessment, career exploration, preparation of an education development plan, work-based learning opportunities, cooperative education, and academic support services. The ability to disaggregate core performance indicator data by special population category enables local districts to focus student support activities and, thereby, improve services. To assist districts in serving nontraditional students, state staff supported professional development and technical assistance for counselors and special population coordinators at the Career Education Conference and the MOSPA Conference. In addition, information and materials are continuously disseminated throughout the year via a counselor and special populations listserve.

#### ***Postsecondary***

CCS has included the components of high skill, high wage, and high demand as part of state program approval for occupational programs and as a required component of all program evaluation that occurs at the college level. Special population needs must be addressed with both state program approval and as part of any program evaluation. Additionally, CCS provides inservices and technical assistance on high skill, high wage, and high demand programs as they relate to special populations with individual community colleges and through the postsecondary unit of MOSPA and MPSSPC. Workshop sessions at the MOSPA 2011 Annual Conference provided

information and strategies to assist occupational faculty ensure that the needs of special population students are well served at the postsecondary levels and are prepared for high skill, high wage, and high demand occupations.

Special population personnel are represented on each of the CCS task forces and advisory committees as the state agency and local community colleges plan for expanded exemplary services and programs. Their representation ensures that the needs of special population students will be identified and that appropriate programs and services will be developed and/or enhanced. Although CCS is uniquely placed within the WDA, Division of Education and Career Success, its physical location provides opportunities to partner and/or coordinate services with other programs in and out of WDA. The placement of CCS allows for state and local coordination of services with the Office of Adult Learning, Commission for the Blind, Michigan Rehabilitation Services, and all U.S. Department of Labor sponsored workforce programs. CCS was instrumental in assisting special population coordinators create a community college specific administrative organization (MPSSPC) to help coordinate supportive services and professional development opportunities across community college campuses and the state.

### **Offering Technical Assistance for Eligible Recipients**

#### ***Secondary***

Technical assistance is a continuous effort involving all staff in the OCTE and occurs through phone calls and e-mail communication on a daily basis. Technical assistance is also provided through annual meeting with new and current CTE administrators, new CTE teachers, teachers of specific career cluster areas, data staff, grant administrators, counselors, and special populations coordinators.

#### ***Postsecondary***

CCS continues to provide technical assistance services as referenced earlier, but is often provided on an individual basis, at numerous conferences and in services held throughout the year (TRENDS, Career Education Conference, MOSPA Conference, New Dean's Orientation, and Annual Data Workshop). In addition to planned compliance and technical assistance visits on community college campuses, daily technical assistance is provided by CCS staff through telephone and electronic communications. In order to expand the base of support for all students in Michigan community college occupational education programs, technical assistance is provided through the Adult Learning Annual Conference, regional meetings, and the Michigan Workforce Development Annual Meeting. Administrative updates and technical assistance is also provided through the five regularly scheduled MODAC meetings.

### **Permissible Activities (Section 124)**

#### **Improving Career Guidance and Academic Counseling Programs**

##### ***Secondary***

Efforts are made, on an ongoing basis, to support career guidance and academic counseling programs. During the year, support is provided by working with CTE regions on specific guidance and counseling activities within their grant applications. In addition, OCTE staff works with the counselor professional associations and staff attend and present at other events, conferences, and inservices. A web page solely addressing the needs of school counselors has been created on the MDE website. *Guidelines for the Use of Educational Development Plans* is a document developed to assist school districts implement Educational Development Plans (EDPs), which are a requirement within school law.

##### ***Postsecondary***

Numerous inservices are held with different employees at the colleges which support career guidance and academic counseling programs, including the TRENDS in Occupational Studies Conference and the MOSPA Conference. Inservices and CAP grant eligibility includes and allows counselors and academic advisers to participate in professional development activities. These professional development opportunities are necessary to assist special population coordinators to become and remain current in research, services, and laws that apply to special population students. In order to ensure that special population students are receiving appropriate services as designated by law, each student must have an EDP to help them achieve their goals.

#### **Establishing Agreements, Including Articulation Agreements, to Provide Postsecondary Education and Training Opportunities for Students**

##### ***Secondary***

OCTE has continued its efforts to establish the linkages between secondary and postsecondary agencies so that students are well prepared for further training and education and can benefit from content alignment so to prevent repeating or duplicating course content. OCTE has required POS for several years through locally-developed "articulated" program agreements where postsecondary credit earned in high school is held in "escrow" until the student arrives at the postsecondary institution. These agreements are reviewed annually. Efforts have been

underway to explore statewide articulation (as opposed to multiple local agency agreements) with interested Michigan community colleges.

Michigan continues to support schools interested in designing and developing Early/Middle College (E/MC) schools. The goal is to design an E/MC program that will increase student achievement by providing opportunities to study and participate in learning activities with hospital or STEM employers and higher education institutions. These specialized schools provide students the opportunity to graduate from the E/MC with training in a marketable occupation, a high school diploma, and a certificate or degree from a community college or state public university. Michigan has 19 E/MC schools and several more districts interested in planning for the future.

In addition to E/MC schools, many early college “programs” have emerged in the form of Enhanced Dual Enrollment and Direct Credit options. Michigan has two dual enrollment laws—one for academic courses and one for CTE courses. These two laws have recently been revised to allow students in grades 9-12 to take up to 10 college courses while in high school. In addition, non-credit industry certification training at the community college is also allowed in the revised laws.

### ***Postsecondary***

Michigan is known for its innovations in early college opportunities as demonstrated through special initiatives, such as the *Gaining Early Awareness and Readiness Undergraduate Programs* (GEAR UP). CCS supports this initiative and works collaboratively with GEAR UP to inform secondary students of the opportunities available to them at community colleges across Michigan. As part of Perkins requirements, community colleges throughout the state continue to establish articulation agreements with secondary schools to implement POS. These agreements afford secondary students the opportunity to enter into an occupational program, take classes while in high school, receive dual enrollment credit, and upon graduation from high school, enter college and work towards certification, an Associate’s Degree, or transfer to a four-year institution.

### **Supporting Initiatives to Facilitate the Transition of Subbaccalaureate Career and Technical Education Students Into Baccalaureate Programs**

#### ***Postsecondary***

Each of Michigan’s 28 public community colleges has one or more campus based university extension programs on their campuses. Some even have separate facilities that house four year university programs so that students can dual enroll in two-year and four-year POS. E/MCs are gaining in popularity. Four public universities, Ferris State University, Northern Michigan University, Lake Superior State University, and Michigan Technological University, act in the capacity of a community college in their respective communities and afford students the opportunity to transition and continue their program of study at the community college to receive a baccalaureate degree. Community colleges are also expanding the number of articulation agreements with universities. Ferris State has articulation agreements with almost all of the community colleges within the state.

### **Supporting Career and Technical Student Organizations**

#### ***Secondary***

OCTE supports six Career and Technical Student Organizations (CTSOs) through modest grant funding and technical assistance. Semi-annual meetings with all directors and ongoing communication with the respective CTE program consultants, as well as assistance to field instructors and administrators, helps ensure that all students in state-approved CTE programs have the opportunity to develop strong leadership skills. A CTSO Director’s Council has been established to provide each CTSO Director with a CTE administrator representative for ongoing leadership support. The organizations vigorously recruit new members, strongly support academic excellence, and give special attention to students with unique needs. These priorities are hallmarks of the CTSO. Various types of support are explored and provided, as are “accommodations”, when appropriate.

Competitive events promote win/win opportunities as students work at their own pace toward set goals. Events designed for student teams showcase the diverse talents of all participants. Many activities aim at improving problem solving and job seeking skills. Student leadership is a critical and necessary part of the career and technical education curricula in all clusters. Although not mandated, many instructors utilize the CTSO to meet the leadership component of the state approved CTE program. Students in all of the organizations take a written test prior to skill competition so that competitive activities may be configured to include special populations, promote academic rigor, and help all students grow into their personal best.

### **Supporting Public Charter Schools Operating Career and Technical Education Programs**

To increase charter school participation, OCTE has a requirement that CTE Perkins grant applicants must document their efforts to include all educational agencies that want to operate CTE programs or have students who want to enroll in CTE programs in the planning and availability of services.

## **Supporting Career and Technical Education Programs That Offer Experience in, and Understanding of, All Aspects of an Industry**

### ***Secondary***

Michigan CTE programs must provide students with a strong experience in all aspects of the industry. Students need to have technical skills, but also need a comprehensive understanding of the industry that they are preparing to enter. Approved CTE programs must include the array of occupations and careers that comprises an industry, from the most basic to the most advanced. Curriculum must include principles of technology, labor and community issues, health and safety issues, and environmental issues related to such industry. Students should be able to demonstrate knowledge of the planning, management, finances, technical, and production skills for the industry relating to the program. All programs incorporate state and/or national level industry-related skill standards.

All instruction must include emphasis on the new skills that employees of the future will need. Academic studies focus on the mathematics, communications skills (reading and writing), and sciences, in the context of the students' career cluster, using an applied or contextual approach. Curriculum content incorporates community issues related to the industry, environmental issues raised, economic issues, finance, health issues, labor issues, leadership/management, safety, technological skills, marketing, and underlying principles of technology. All aspects of the industry are available to all students in approved CTE programs, regardless of future education and employment plans.

### ***Postsecondary***

CCS actively provides support to the MEATA and the Office of Apprenticeship and Training. Both organizations help educate and support students in the skilled trades and during their internships. MEATA helps coordinate the development and provision of apprenticeship and training through research, leadership, and innovative practice by workforce organizations, collaborating community colleges, and economic development partners. Annual meetings bring these partners together to share innovations and practices to improve employee training. Within the WDA, CCS is also an active partner in many work-based initiatives whereby student internship and work related opportunities are sponsored and promoted.

## **Supporting Partnerships Between Education and Business or Business Intermediaries, Including Cooperative Education and Adjunct Faculty Arrangements at the Secondary and Postsecondary Levels**

### ***Secondary***

The MDE supports work-based learning experiences, including career and technical cooperative/capstone education, by working closely with the Michigan Career Placement Association (MCPA). This organization works collaboratively with OCTE to conduct three statewide work-based learning conferences during the school year. Additionally, pupil accounting rules have been promulgated to assure that requirements are met to align business and industry standards and provide quality educational opportunities for students. These rules indicate that all state and federal regulations will be followed.

Michigan has enacted The Postsecondary Enrollment Options Act [1996 PA 160] and the Career and Technical Preparation Act [2000 PA 258], that require school districts to support dual enrollment for pupils in grades 11 and 12, if certain requirements are met. Additionally, MDE encourages seamless transitions between secondary and postsecondary education by promoting dual enrollment and supporting middle and early college initiatives, as well as encouraging direct credit, articulated credit, and virtual learning for Michigan's students.

### ***Postsecondary***

Institutions receiving Perkins funds develop partnerships with business and industry in order to establish cooperative career education, work study, internships, externships, on-the-job training, and apprenticeships with an emphasis on work-based learning. Additionally, individuals from business and industry participate on advisory boards to assist institutions in identifying skills and adopting strategies that enable students to overcome barriers faced for employment in high-skilled, high-wage and high-demand occupations that lead to self-sufficiency. Institutions also recruit individuals from business and industry as adjunct faculty for occupational programs. The partnership between business, industry, and educational institutions is essential to promote access to and success in occupational programs.

## **Providing Activities to Support Entrepreneurship Education and Training**

### ***Secondary***

The OCTE believes that expanding the availability of youth entrepreneurship education resources is a critical part of CTE. Since entrepreneurship programs have a proven track record of keeping students in school, each CTE program was encouraged to promote educational opportunities by using the statewide standards for youth entrepreneurship education. Entrepreneurship programs are being monitored for quality by CTE staff. One of the

curriculum segments in all Marketing programs is entrepreneurship. Each of the CTE programs in Michigan have curriculum standards dedicated to entrepreneurship education. These standards will be part of the statewide testing initiative in these programs. CTE students also participate in entrepreneurial competitive events in CTSOs. Business partnerships continue to be stressed through a requirement that each program advisory committee must have a majority of their membership from the appropriate business and industry area.

MDE is working with the MEDC on joint activities to encourage entrepreneurship and entrepreneurial thinking in K-12 education. Michigan continues to be a member of the National Consortium for Entrepreneurship Education.

### ***Postsecondary***

Many of the institutions receiving Perkins funds have strengthened efforts to increase entrepreneurship on their campuses. The Entrepreneurial Center for Innovation and Development was developed as a strategy to accomplish this workforce development goal. Through the School of Continuing Education and Workforce Development, partnerships with business and industry in support of developing entrepreneurial opportunities have increased. Other institutions have developed entrepreneurial programs to encourage students to establish small business initiatives.

The WDA also promotes partnerships between education, business, and business intermediaries through funding alliances with WIA statewide dollars that promote entrepreneurship. Two examples are the Business Training Alliance (BTA) and the Agriculture and Food System Sector Alliance (AFSSA). The BTA coordinates with business and educators to offer community classes for entrepreneurs in Wexford and Missaukee Counties. The classes cover foundational business skills entrepreneurs need to succeed. The AFSSA convenes local and regional farmers, educators, businesses, government officials, and others to engage in a collaborative process to support and create jobs and enterprises throughout the regional farm and food system and to shape training and educational programs that support farm and food entrepreneurs and workers. More information on the BTA and AFSSA can be found at: <http://www.nwm.org/main-site/homepage.html>.

## **Developing Valid and Reliable Assessments of Technical Skills**

### ***Secondary***

The selection and adoption of assessments is a challenge for Michigan. Progress has been slower than planned due to the lack of additional funding, which constrains the assessments that can be considered for statewide adoption and available staff devoted to the project. Additionally, there is a lack of reliable, valid, affordable assessments aligned to nationally-recognized standards that are appropriate to secondary students and for which scores can be obtained for state reporting. Michigan's process for identifying statewide assessments for secondary programs utilizes multiple referent groups. The Assessment and Accountability Referent Group (AARG) consists of assessment and measurement experts from intermediate school districts, the MDE Bureau of Assessment and Accountability (BAA), community college representatives, representatives from CCS in the WDA, secondary CTE administrators, and OCTE staff. The review and selection of assessments for each career cluster area involves a Cluster Referent Group (CRG) which consists of secondary and postsecondary content area experts, one or more measurement professionals, a secondary CTE administrator, and OCTE research and program staff. OCTE staff working on Technical Skill Assessment (TSA) review and adoption, the Technical Skill Assessment Work Group (TSAWG), meets weekly to review and discuss progress and processes.

Additionally, OCTE staff have been working on a Memorandum of Understanding for membership in the Career and Technical Education Cluster Pathway Assessment Collaborative (CTECPAC), which will allow the development of a TSA through the Career Pathway Consortium (CPC). The consortium is led by the Kansas Department of Education. The goal of the CPAC is to jointly develop TSAs which can be administered on the Smarter Balanced Assessment Consortium's web-based assessment platform. Currently, the member states are all Smarter Balanced oriented and include Kansas, Colorado, Michigan, Nebraska, and Mississippi. Membership requires contributing the development of an assessment through the collaborative process. Contributing members can use other states' contributed assessments for a nominal charge. Nine cluster pathway areas have been identified for development: General Agriculture, Animal Systems, Plant Systems, Production, Maintenance, General Business, Finance, Marketing, and Education. Development processes will take place using multiple processes, including in-person and web/conference call technology to reduce costs and travel time.

The timeline for reviewing and selecting TSAs was refined during the 2010-11 school year. Career Clusters and CTE programs with the largest numbers of students enrolled have been prioritized for assessment selection with a yearly goal based on student populations. Michigan's process involves review and evaluation of prospective candidate assessments for psychometric qualities, review of assessment information by CRGs, and processes to select a specific assessment for field test administration, which includes an optional content review of the assessment. Assessments that are field tested are evaluated using a both a survey from students, teachers, and proctors, as well as the assessment data results. Assessments with acceptable field test feedback and ratings are adopted for full implementation the next school year.

During the 2011-12 school year, assessments were reviewed for the following career clusters: Information Technology; Law, Public Safety, Corrections, and Security; Collision Repair Technician; and the Arts, A/V

Technology, and Communications. Two field test administrations were conducted; for the Law, Public Safety, Corrections, and Security Cluster and the Information Technology Career Cluster. The review and selection process for the Collision Repair Technician program; and the Arts, A/V Technology, and Communications Career Cluster will continue into the 2012-13 school year and are targeted for field testing during Spring 2013.

OCTE continues to struggle to match student assessment scores to individual student records using the state Unique Identifier Code (UIC). To increase the accuracy of the UICs, student directory files linking student names to UICs were created for each adopted assessment that is being implemented. The files were provided to the assessment vendor. Oklahoma accepts uploads of the data freely for post processing of the data and OCTE purchases a web based tool option through the National Occupational Competency Testing Institute (NOCTI), which makes the data available to districts during test administration. This process has improved the accuracy of the data and we continue to initiate collaboration with assessment vendors to allow us to share data prior to test administration through data share agreements. Assessment data issues were decreased during the 2011-12 school year and assessment data that still had issues went through a UIC resolution process with districts through the OCTE Moodle application on the CTEIS.

### ***Postsecondary***

CCS, through the MCCDEC, has continued to identify skill certifications and technical skill assessments for occupational programs. A study was conducted this year that matched outcomes of 1P1: Technical Skill Attainment with available assessments. These were cross-referenced to the various programs offered at the community colleges in order to provide information on available third-party assessments and which assessments were actually being used by community colleges to report on technical skill attainment. Data was also reviewed for 2P1: Certification, Credential, and Degree, to see if credentials received as a result of passing an assessment were being counted as an outcome for 2P1. MCCDEC and state staff also reviewed the validity and reliability of the data. These data were shared with the special populations coordinators. In addition, CCS has an approval process whereby individual community colleges can submit proposed skill certifications and technical skill assessments for review. Faculty, as curriculum experts in their field, verify the validity and reliability of the assessments. A database of these assessments is maintained on the MCCNET website. The skill assessments for 1P1 are proposed for the duration of the Perkins State Plan for Career and Technical Education.

### **Developing or Enhancing Data Systems to Collect and Analyze Data on Secondary or Postsecondary Academic and Employment Outcomes**

#### ***Secondary***

Data specific to participation in, and progress through, secondary CTE programs are collected through the CTEIS. Data from various other sources are matched into the CTEIS system to prevent duplicate data collections. Examples include: student demographic and graduation status data elements are collected in, and extracted from, the Michigan Student Data System (MSDS), student academic assessment data is collected and extracted by the BAA system, and student technical skill assessment data is collected and shared with OCTE based on a data sharing agreement. In all cases, record-matching occurs based on the student's Unique Identification Code (UIC) and a de-duplication process, which is then compiled together within the CTEIS for all CTE students. Data elements are then reported back to districts on relevant students for district use and federal reporting. Automated systems check student identification against the Center for Educational Performance and Information (CEPI) UIC master to maintain up-to-date identification information. During 2011-12, preliminary discussions were held regarding further automating the connection between CTEIS to other CEPI systems such as the Educational Entity Master (EEM). OCTE and CEPI identified CTE fields for inclusion in the Statewide Longitudinal Data System (SLDS) and business rules were developed. Incorporation of CTE data into the Michigan SLDS will continue through 2012-13.

During 2011-12 OCTE explored matching CTE student records with community college student data collected by CEPI. Progress was slow due to limited staff time to trouble-shoot problems such as duplicate records. OCTE research staff also began attending CEPI meetings of SLDS stakeholders and community college data meetings to become familiar with postsecondary and workforce data. Also in 2011-12, OCTE developed initial data dashboards in Tableau to allow districts to drill down into data and generate graphs and tables for data mining. OCTE continued support of a survey center to assist local districts to complete a follow-up survey of CTE student placement in employment, postsecondary education, or military.

#### ***Postsecondary***

CCS, with input from MCCDEC, revised the data collection/application site, MCCNET. Reports were expanded for the core indicator requirements so colleges received more information about the data being submitted. CCS provides community colleges with detailed instructions and guidelines to use to measure the validity and reliability of the data submitted to the state. Edit checks are performed and year-to-year comparisons by community college are made to uncover any possible unreliable data. Colleges are contacted if data does not meet the criteria set forth in the instructions. MCCDEC reviews these data and offers recommendations to improve reliability and validity. In addition, community colleges have been very active in providing input, as well as data into the development of the K-20 Longitudinal Data System.

**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**

**Secondary**

Two teacher education improvement grants were awarded to public universities that prepare and recommend high quality pre-service students for vocational certification. Michigan requires that all CTE programs be taught by teachers with specific and appropriate teaching certificates to receive federal and state funding. CTE teacher education institutions that received a Perkins grant were required to conduct activities that focused on the recruitment and retention of CTE teachers. These institutions also provided support to practicing teachers through inservices, conferences, and other training opportunities in cooperation with state staff. OCTE is currently collaborating with the MDE, OPPS in the development of new processes for an alternate route to teacher certification and advanced level credentials. This year, grant requirements included that recipients conduct a presentation of outcomes and information at the Michigan Career Education Conference or a related program. Evaluations generated by these activities were excellent.

OCTE staff actively participated on the internal task force initiated by OPPS and on the Professional Standards Commission for Teachers (PSCT), whose primary focus was the development of framework for Michigan educator evaluations.

**Postsecondary**

Annually, postsecondary institutions that receive Perkins funds must include a plan that addresses the methods the college will use to improve, recruit, and retain CTE teachers, faculty and career guidance and academic counselors, including groups underrepresented in the teaching profession in their annual application. The college's methods must also include a plan that addresses how individuals from business and industry will be supported through the transition to teaching. A few of the methods used by community colleges to advertise and recruit qualified applicants are through: newspapers (local, regional, state, and national), mailing lists (hard copy and electronic), professional journals, national publications, and at recruitment conferences. In order to retain qualified faculty from business and industry in making the transition to teaching, colleges have held new faculty orientations, developed faculty development curriculum, provided mentoring by pairing new faculty with experienced faculty, and provided professional development opportunities at conferences, meetings, and other relevant workshops.

**2. Progress in Developing and Implementing Technical Skills Assessments**

**Secondary**

During the 2011-12 SY CTE concentrators were assessed in the Career Clusters listed in the table below:

Career Cluster	Assessment Vendor	Concentrators Assessed
Business Management & Administration	NOCTI	1,607
Finance	NOCTI	2,788
Health Sciences	National Foundation Skills Assessment	5,058
Education	Pearson	42
<b>Total</b>		<b>9,495</b>

Four Career Cluster areas were targeted for the assessment selection process for the 2011-12 school year. Assessments were screened and assessment vendors were forwarded sets of technical questions. Assessment vendor question responses were reviewed and evaluated by measurement experts against psychometric criteria to allow a report to be created for review by CRG members. Criteria for adopting an existing assessment included that the assessment must be reliable, valid for the intended purpose (including aligned to the state standards), bias-free, feasible to administer in a secondary setting, affordable, and of adequate utility for required reporting purposes and program improvement. CRG members, who consist of secondary and postsecondary educators, business and industry representatives, measurement specialists, and state staff, were utilized to review the technical report and the vendor information during scheduled conference calls.

The Transportation, Distribution and Logistics CRG determined that a cluster-level assessment is not feasible for this cluster due to the diversity of programs within the cluster. The automotive technology subgroup recommended that the state utilize the Automotive Service Excellence (ASE) Student Certification test until the Michigan automotive licensing exams could be updated and made available as the technical skill assessment for automotive technology programs. OCTE field tested both the state of Michigan certification TSA and the ASE Student Certification TSA in the previous year. Therefore, the ASE Student Certification TSA will be administered during the 2012-13 school year.

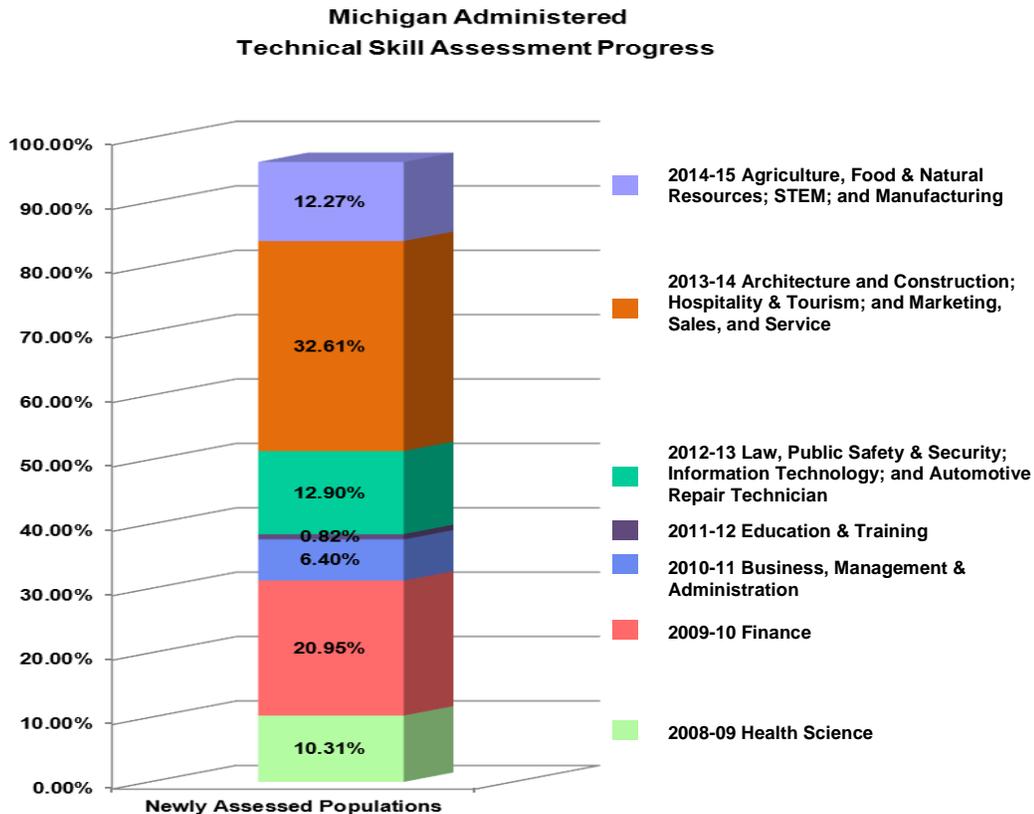
The Information Technology Career Cluster went through the assessment selection process and after reviewing multiple assessments, a test was selected for field testing. The Strata Certification test was field tested with students from various schools in various locations of Michigan. The final recommendation following the field test was positive and the Strata test will be implemented during the 2012-13 school year.

The Arts, AV, and Communication Career Cluster went through the assessment selection process and after reviewing multiple assessments the group clearly decided that there was not a test that would fit the whole cluster. Therefore, the cluster was broken into two groups by program areas: Graphic and Printing Technology and Radio and Television Broadcasting Communications. The first group decided a General Content Review was needed and a session was convened to perform a review of three tests. The second group was satisfied with reviewing test blueprints and comparing the content alignment. Both program areas selected a test for field testing: the PrintED/SkillsUSA Graphic Communications Skill Connect Assessment for Graphic Communications and the Skills Connect: Audio/Television combination test were chosen for field testing in various schools in various locations of Michigan during the 2012-13 school year.

The Collision Repair Career Cluster went through the assessment selection process and, after reviewing multiple assessments, a test was selected for field testing. The ASE Student Certification test for Collision Repair test was selected for field testing during the 2012-13 school year.

The Law, Public Safety, and Security Career Cluster went through the assessment selection process and the referent group reviewed multiple assessments. After the CRG subgroup performed a General Content Review on four tests, one test was selected for field testing. The NOCTI Criminal Justice test was field tested with students from various schools in various locations of Michigan. The final recommendation following the field test was positive and the NOCTI Criminal Justice assessment will be implemented during the 2012-13 school year.

The following table represents Michigan's progress on selecting and adopting assessments and shows projected progress through 2014-15. By 2014-15 96.26% of students will be enrolled in programs for which an assessment will be required.



Note: Data Reflects 2011-12 SY Data for CTE

### Postsecondary

The MCCDEC conducted a two year review of third party certifications, assessments, licensures, and other credentials. Third party assessments are recommended for approval as they become identified and have been added to the master database of approved assessments. These results are posted on the Michigan Community College Network (MCCNet) website: <http://www.michigancc.net>. This information includes the name of the granting agency and necessary variables (e.g. credentialing entity, credential type, test schedule, contact information) required by Michigan community colleges to gather and report on these data for 1P1: Technical Skill Attainment. A study was conducted again this year that matched outcomes of 1P1: Technical Skill Attainment with available assessments. These were cross-referenced to the various programs offered at the community colleges in order to provide

information on available third-party assessments and which assessments were actually being used by specific community colleges to report on technical skill attainment. Through this process, colleges were able to discover assessments they did not know existed and were able to expand their ability to report on 1P1. Data from 1P1 were also cross-walked with 2P1 since some colleges reported on 1P1 but did not include the credential information in 2P1. This allowed colleges to go back to their campuses to find out why credential data was not being included in 2P1 in order to improve their reporting. As more certifications and/or assessments become available or known, they are added to this list of state recognized certifications and assessments. Community colleges are required to submit data for all programs that are identified as having an assessment. If they are unable to report results for a program with a required assessment, colleges must submit the reasons for not being able to report on a particular program.

### 3. Implementation of State Program Improvement Plans

#### A. State's Performance on Required Indicators for 2011-2012

##### *Secondary*

##### **Definitions:**

**Participant** – A secondary student who has completed a minimum of 10% of state approved standards in any career and technical education (CTE) program area.

**Concentrator** – A secondary student who has completed a minimum of 50% of state approved standards, plus enrolled in more credits, courses, hours, or units in a single program area to meet additional standards.

**1S1 – Academic Attainment Reading:** The performance level for 2011-12 for this indicator was 51.69%, a decline of 14.64% compared to 2010-2011. This compares to a percent proficient rate of 63% for all students who took the reading Michigan Merit Exam (MME) in 2011. Though this indicator has declined, it met the 90% threshold of the adjusted level of performance. The large change observed in 2011-12 may be attributed to the change in cut scores for the MME which increased by 20% percent compared to the previous year. The cut scores were changed to reflect career and college ready expectations for Michigan students and the CPI target for this indicator was changed to match the Annual Measureable Objective (AMO) in the state ESEA waiver. The MME is administered in the Spring of a student's junior year of high school. Therefore, the assessment scores reflect a student's academic attainment prior to completing, and sometimes prior to entering, the CTE program, where many of them thrive in learning CTE skills, as well as integrated reading and mathematics skills.

**1S2 – Academic Attainment Mathematics:** The performance level for 2011-2012 for this indicator was 23.05%, a decline of 27.95% compared to 2010-2011. This compares to a percent proficient rate of 52% for all students who took the math MME in 2011. This performance did not meet Michigan's adjusted level of performance of 30% and did not meet the required 90% threshold. The cut score on the math portion of the MME was also increased by 20% to reflect career and college ready expectations for Michigan students and the CPI targets for this indicator was changed to match the AMO in the state ESEA waiver. The decline observed in 1S2 may be directly attributed to this change in cut scores. The assessment scores reflect a student's academic attainment prior to completing, and sometimes prior to entering, the CTE program, where many of them thrive in learning CTE skills, as well as integrated reading and mathematics skills.

**2S1 – Technical Skill Attainment:** For 2011-12, the performance level for this indicator was 55.27%, an increase of 0.92% over the previous year. This performance level exceeds Michigan's adjusted level of performance. The slight increase in this indicator is notable, given that the number of students who took technical skill assessments in the state increased from 9,100 students last year to 9,495 students this year and also because the adjusted level of performance was increased from 35.05% to 48.00% this year.

**3S1 – School Completion:** The performance level for 2011-2012 for this indicator was 94.67%. This represents a 0.28% increase compared to last year and compares favorably to the 2010-11 state five year graduation rate of 79.2%. The 2011-2012 performance exceeds Michigan's adjusted level of performance which was raised from 83.00% in 2010-2011 to 93.00% this year. This indicator was computed using data for the cohort of students that entered ninth grade in 2006-07. The denominator includes all concentrators in the cohort year (expected four year graduation date) of 2009-2010. The numerator is the number of students who had graduated in 2010-2011 or before, (within five years of entering ninth grade) with a high school diploma or other measure of high school completion (e.g., special education certificate of completion). The measure is currently reported a year behind the ESEA measure because the Perkins reporting deadline is earlier than the reporting deadline for the ESEA measure.

**4S1 – Student Graduation Rates:** The performance level for this indicator for 2011-2012 was 94.85%, an increase of 0.56% compared to 2010-2011. This 2011-2012 performance exceeds Michigan's adjusted level of performance of which was increased to 85.00% from 80.00% the previous year. This measure was computed using data for the cohort of students that entered ninth grade in 2007-08. The denominator includes all concentrators in the cohort year (expected four year graduation date) of 2011. The rate for CTE students compares favorably to the 2010-2011 state four year graduation rate of 74.33%. The numerator is the number of students who graduated in 2010-2011 or before, (within four years of entering ninth grade) with a regular high school diploma. This measure aligns to the graduation

rate reported for ESEA for 2010-2011. The measure is currently reported a year behind the ESEA measure because the Perkins reporting deadline is earlier than the reporting deadline for the ESEA measure.

**5S1 – Placement:** The performance level for this indicator for 2011-2012 was 95.33%, a modest increase of 0.97% compared to the previous year. The placement rate in Michigan has continued to increase each year in the last three years. Michigan’s 2011-2012 performance on this indicator exceeded the adjusted level of performance which was 93.00%, a decline of 2.04% compared to the previous year’s adjusted level. The data indicate that 19 out of 20 CTE students in Michigan continued their postsecondary education or advanced training, or were in the military, or were employed which is significant given the national unemployment rate of approximately 10%.

**6S1 – Nontraditional Participation:** The performance level for this indicator for 2011-2012 was 24.44% an increase of 0.94% compared to 2010-2011. Michigan’s performance on this indicator exceeded the adjusted level of performance which was 23.00%. The nontraditional participation rate in Michigan has increased each year in the last three years. Michigan continues to work on increasing this indicator through the Breaking Traditions Award Program and a yearly workshop addressing strategies for improving nontraditional participation. This year Michigan held a day long workshop focused on nontraditional participation led by Courtney Reed Jenkins, an educational equity expert and Director of Professional Development at the National Alliance for Partnerships in Equity (NAPE).

**6S2 – Nontraditional Completion:** The performance level for this indicator for 2011-2012 was 28.90%, a modest increase of 0.55% compared to the previous year. The nontraditional completion rate exceeded the adjusted level of performance of 22.00%. The nontraditional completion rate in Michigan has increased each year in the last three years.

**Summary of the 90% Threshold:**

Michigan exceeded the targeted levels for six CPIs (2S1, 3S1, 4S1, 5S1, 6S1, 6S2), met 90% of the adjusted level of performance for one CPI (1S1), and was below the 90% adjusted level for one CPI (1S2). Statewide performance on six of the eight indicators (2S1, 3S1, 4S1, 5S1, 6S1, and 6S2) was better this year compared to 2010-2011. Statewide performance on two of the eight indicators (1S1 and 1S2) declined this year compared to 2010-2011.

**Improvement Plan**

Action Steps	Implementation	Staff
(1) Review and analyze data for 1S2 to identify mathematics achievement gaps for CTE students compared to all high school students.	Fall 2012/ Winter 2013	Perkins Teams
(2) Conduct a technical assistance workshop with CTE Administrators addressing those gaps in performance for 1S2.	Winter 2013	Perkins Teams Data Unit
(3) Provide technical assistance to local programs as they develop their local improvement plans.	Spring 2013	Perkins Teams
(4) Utilize relevant offices within MDE regarding proven mathematics strategies.	Spring 2013	Perkins Teams

In addition, see the Improvement Plan for Special Populations categories in B. below.

**Postsecondary**

**Definitions:**

**CTE Concentrator** – A postsecondary/adult student who:

1. Completes at least 12 academic or CTE credits within a single CTE program area sequence that is comprised of 12 or more academic and technical credits and terminates in the award of an industry-recognized credential, a certificate, or a degree. These credits must have been earned as of the beginning of the reporting year.
2. Completes a short-term CTE program sequence of less than 12 credits that terminates in an industry-recognized credential, a certificate, or a degree.

**CTE Participant** – A postsecondary/adult student who has one or more credits in any CTE program area.

**1P1 – Technical Skill Attainment:** Michigan community colleges came within approximately 2% of meeting the expected level of performance. Economically Disadvantaged (92.08%) and Displaced Homemaker (93.18%) exceeded the expected level of performance. Individuals with Disabilities (88.71%), Single Parent (86.84%) LEP (85.71%), and Nontraditional (87.01%), while not meeting the performance level, did come within 90%. Tech Prep students (67.05%) did not either meet or come within 90% of the expected levels of performance.

**2P1 – Credential, Certificate, or Degree:** Michigan community colleges exceeded the expected level for 2011-12. All special populations groups with the exception of LEP exceeded the expected performance level. Tech Prep students did increase from 20.91% to 23.55% but did not come within 90% of the threshold. Anecdotal information

from the colleges identifies a reduction in the number of hours that some students are able to maintain. There are differing reasons for this reduction, including the economic factors that are hitting many households and the reduction in available funds to pay for additional classes. Employment opportunities are taking a priority over completing a certification and/or degree and some jobs do not require credentials. Additionally, many businesses either have cut back or eliminated tuition reimbursement for employees. The last several years have seen an every other year fluctuation in the graduation rates that are reported. This is partly caused by the way programs offer their courses (every other year) or by the elimination of some classes due to low enrollment for the specific section.

**3P1 – Student Retention or Transfer:** Michigan's community colleges came within approximately .5% of the expected level of performance by achieving a 69.42% performance level. All special populations students either exceeded or came within 90% of achieving the expected levels of performance. The following exceeded the expected performance level: Individuals with Disabilities (75.54%), Economically Disadvantaged (71.54%), Displaced Homemakers (74.63%), and LEP (83.80%). Nontraditional (68.48%) and Single Parent (69.90%) came within less than 2% of the expected performance level while Tech Prep students exceeded it by achieving 71.55%.

**4P1 – Student Placement:** Michigan community colleges exceeded the expected state performance level of 70.00% by achieving an actual performance level of 84.18%. Individuals with Disabilities (85.92%), Economically Disadvantaged (77.34%), and Nontraditional (82.22%) all exceeded the expected performance level. Single Parent (66%) and Tech Prep (65.56%) both came within 90%. However, Displaced Homemakers (58.52%) and LEP (55%) did not come within 90%.

**5P1 – Nontraditional Participation:** Michigan community colleges exceeded the expected state performance level of 23.62% by achieving an actual performance of 25.19%. All special populations groups with the exception of Displaced Homemakers, exceeded the expected level: Individuals with Disabilities (25.66%), Economically Disadvantaged (28.27%), Limited English Proficient (28.97%), Single Parents (24.78%), Nontraditional (99.66%), and Displaced Homemakers (18.753%). Tech Prep came within 90% of meeting the expected level of performance by achieving a performance level of 21.83%.

**5P2 – Nontraditional Completion:** Michigan community colleges exceeded the expected state performance level of 20.60% by achieving an actual performance of 20.71%. Individuals with Disabilities (24.59%), Economically Disadvantaged (23.31%), Single Parents (21.38%), and Nontraditional (97.19%) exceeded the expected performance level. Displaced Homemaker (19.83%) and LEP (20.26%) were less than 1% within reaching the expected level of performance. Tech Prep did not come within the 90% threshold by achieving a performance level of 17.51%. It bears noting that the populations were extremely small.

#### **Summary of the 90% Threshold:**

Michigan community colleges exceeded five of the expected levels of performance and came within 90% of the expected level for one of the indicators.

### **B. State's Performance Results for Special Populations**

#### **Secondary**

**1S1 – Academic Attainment Reading:** For this indicator, students in the special population categories of Disabled (18.63%), Economically Disadvantaged (39.27%), Single Parents (34.78%), Migrants (15.38%), Nontraditional Enrollees (46.99%), and Limited English Proficient (14.62%) all achieved at a much lower level than the entire CTE population (51.69%) for Michigan. However, CTE special population students performed better than similar students in the general population. For example, the rate of reading proficiency for all economically disadvantaged students is 35.1%, 12.9% for LEP students, and 16.9% for disabled students. The challenges that many of these special populations face often make it difficult to achieve success on academic assessments. OCTE, through its program consultants for each career cluster, will continue to provide technical assistance to teachers to integrate academics and emphasize the application of academics in CTE to provide greater opportunity for these students to succeed. OCTE training workshops held for administrators in both the Spring and Fall will continue to focus on strategies for improving the performance of 1S1 for special population students.

**1S2 – Academic Attainment Mathematics:** For this indicator, students in the special population categories of Disabled (3.87%), Economically Disadvantaged (12.76%), Single Parents (1.47%), Migrants (0.00%), Nontraditional Enrollees (15.63%), and Limited English Proficient (7.30%) all achieved at a much lower level than the entire CTE population (23.05%) for Michigan. Compared to similar students in the general population, rates of math proficiency were slightly better for economically disadvantaged CTE students compared to all economically disadvantaged students (11.6%). CTE students with LEP had slightly lower rates of math proficiency compared to all LEP students (8.1%) and CTE students with disabilities performed about the same as other students with disabilities in math proficiency. Mathematics skills are essential to the postsecondary success of students. OCTE recognizes this and will continue to provide technical assistance to teachers to support the integration of math throughout CTE programs and to help them highlight the applications of math within those programs.

**2S1 – Technical Skill Attainment:** For this indicator, students in all special population categories mentioned previously, except Single Parents (55.56%), performed well below the state average (55.27%). OCTE will stress that programs encourage learning opportunities and assist special population students in their programs to help improve this indicator.

**3S1 – School Completion:** For this indicator, students in the special population category of Single Parents (0.00%) performed at a significantly lower rate than the general CTE population (94.67%) from Michigan, compared to the other special population categories. All other special population categories performed at above 90.00% for this indicator and Migrants completed school at 100.00%. This compares favorably to the five year graduation rate for similar students in the general population. Overall statewide graduation rates in 2010-11 were Migrant (73.33%), Economically Disadvantaged (67.16%), LEP (73.44%), and Students with Disabilities (64.79%). As mentioned for the academic indicators, OCTE will continue to stress increasing opportunities for special populations students to succeed in academics any way possible.

**4S1 – Student Graduation:** For this indicator, students in the special population categories of Disabled (85.05%), Economically Disadvantaged (91.60%), Single Parent (88.54%), and Limited English Proficient (88.51%) performed at a lower rate than the general CTE population (94.85%) from Michigan. However, the rates for CTE special populations students compare favorably to the four year graduation rate for similar students in the general population. Overall statewide graduation rates in 2010-11 were Migrant (59.62%), Economically Disadvantaged (62.95%), LEP (61.51%), and Students with Disabilities (51.95%). OCTE will provide technical assistance to administrators and teachers to help improve student persistence. All Migrant students (100.00%) graduated and Nontraditional enrollees (94.84%) performed at the same level as the entire CTE student population.

**5S1 – Placement:** For this indicator, students in the all special population categories performed at a lower rate than the general CTE population (95.33%) in Michigan. The placement rates for all sub-population categories except Migrants (66.67%) was greater than 85.00% and are within the 90% adjusted level of performance. Placement is always emphasized in OCTE communications and training with CTE programs. Michigan can focus specifically on these noted subgroups to seek improvement.

**6S1 – Nontraditional Participation:** For this indicator, students in the special population categories of Disabled (17.51%), Limited English Proficient (15.29%), and Migrants (23.08%) performed at a lower rate than the general CTE population (24.44%) from Michigan, while students in the special population categories of Economically Disadvantaged (27.07%) and Single Parent (50.00%) performed at a higher rate than the general CTE population from Michigan. OCTE will also include nontraditional indicators when emphasizing technical assistance with programs to seek improvement for special population students.

**6S2 – Nontraditional Completion:** For this indicator, students in the special population categories of Disabled (29.54%), Single Parent (40.00%), and Migrant (66.67%) performed at a higher rate than the general CTE population (28.90%), while students in the special population categories Economically Disadvantaged (25.78%) and LEP (17.39%) performed at a lower rate than the general CTE population. OCTE will also include nontraditional indicators when emphasizing technical assistance with programs to seek improvement for special population students.

**Summary of Disparities:**

Disabled students, Economically Disadvantaged students, and Single Parents all continued to perform at a lower rate than the general CTE population, with the students with disabilities performing at about a rate of 5% to 83% lower than CTE students in general, with 1S2 being the lowest. Nontraditional students performed consistently with the general CTE population, within 75% to 90% of the general student performance for each indicator.

**Improvement Plan**

OCTE reviews local recipient grant applications and final reports and provides technical assistance on the basis of a team structure. Four Perkins teams, comprised of OCTE staff, service six to seven regions of the state for CTE grants. In addition, a Perkins Leadership Team, comprised of representatives from each team, meets regularly to determine and recommend policy and procedures relating to CTE.

Action Steps	Implementation	Staff
(1) Review and analyze data reflecting the disparities in performance by disaggregated categories as compared to all CTE students and any other information which may identify areas of the state, student populations, etc., indicating gaps in performance as compared to that of the whole state. Special attention will be given to gaps for African American males.	Fall 2012/ Winter 2013	Perkins Teams
(2) Determine, provide and require funding-application research based activities proven to positively affect student performance especially for those students at high risk.	Winter 2013	Perkins Teams
(3) Develop statewide and regional technical assistance events/activities addressing those gaps in performance, specific regional needs, new mandates (assessments) based upon assessed needs and recommendations from grantees.	Winter/Spring 2013	Perkins Teams Perkins Leadership

Action Steps	Implementation	Staff
(4) Provide technical assistance events/activities as developed and amend, as needed.	Fall 2012 Winter/Spring 2013	All OCTE
(5) Continuously monitor for changes in assistance needs by monitoring subgrantees via desk audit and/or onsite visit, utilizing relevant advisory groups, conducting frequent communication to all clientele and data analysis.	Fall 2012 Winter/Spring 2013	All OCTE

No later than **July 1, 2013**, a complete schedule of technical assistance activities will be finalized for implementation in the 2013-2014 grant year. Events and activities will focus on directly impacting the number of CTE students who have failed to score a level 1 or 2 on either (or both) of the ESEA academic tests.

#### 4. Implementation of Local Program Improvement Plans

##### *Secondary*

Michigan has 25 regional eligible recipients for CTE funds. Local Improvement Plans will be required for regions as indicated below:

Indicator	Number of Regions (2010-2011)	Number of Regions (2011-2012)	Federal Target 2010-2011	Federal Target 2011-2012
1S1	1	11	48.00%	57.00%
1S2	1	21	46.00%	30.00%
2S1	1	2	35.05%	48.00%
3S1	0	0	83.00%	93.00%
4S1	0	0	80.00%	85.00%
5S1	0	0	95.04%	93.00%
6S1	12	6	25.00%	23.00%
6S2	4	4	21.20%	22.00%

Only one out of the 25 regions met all eight indicator targets. The remaining 24 regions failed to make 90% of at least one CPI. The number of regions not meeting the 90% threshold improved for indicator 6S1 (from 12 to 6) compared to last year. The number of regions meeting the 90% threshold worsened for indicators 1S1 (1 to 11), 1S2 (1 to 21), and 2S1 (from 1 to 2) compared to last year while the number of regions meeting the 90% target remained the same for indicators 3S1 (remained at 0), 4S1 (remained at 0), 5S1 (remained at 0), and 6S2 (remained at four) compared to last year.

A determination of disaggregated categories of students for whom there were disparities or gaps in performance compared to all CTE students will be made to assist regions in the development of Improvement Plans. Particular attention will be paid to the performance gaps for African American males. The state of Michigan and the 24 regions will be required to develop improvement plans with action steps, timelines, and staff responsible no later than March 1, 2013. Applications for funding for 2013-2014 are due April 1, 2013 and improvement plans must be consistent with the activities selected as part of these applications. In January 2013, the OCTE will hold technical assistance training for those regions which did not meet the Core Performance Indicator standards. The training will include technical assistance on analyzing and using the performance data to develop regional improvement plans.

##### *Postsecondary*

This past year, colleges have continued to work in collaboration with MCCDEC to improve data collection and reporting. Each college receives a history of their data along with whether or not they came within the 90% benchmark. Colleges are asked to review their plans and make any adjustments in their local annual application. This serves as their local improvement plan. Even if a performance level is achieved, colleges are required to undertake activities to demonstrate continuous improvement.

The MCCDEC meets quarterly and reviews definitions and methodology for consistency and clearness in order to achieve valid and reliable data. The guidelines were pilot tested by several community colleges in order to make sure methodologies and definitions could be followed by the community colleges. The core indicator methodologies were strengthened by the fact that CCS reviewed and discussed all core indicator methodologies as a group, both internally at each community college and externally by MCCDEC and other groups, i.e., MODAC.

Core indicator results were reviewed using internal edit checks unique to each community college (e.g. program coding), comparisons to similar reports, preliminary reports run at the state level, and detailed review of a sample of individual student records to ensure accuracy via onsite technical assistance. Special technical assistance was also offered to any community college that asked or required it.

An analysis was conducted of each core indicator to indicate the number and percentage change from baseline data. Data is posted on the secured side of MCCNet, for further analyses and data is reviewed to ensure that the data files uploaded without error. Corrections and/or changes are again made at this level, if necessary. Final data are posted on the public side of MCCNet.

#### **5. Tech Prep Grant Award Information**

Michigan did not award Tech Prep grants in fiscal year 2011-2012.