

Maine CONSOLIDATED ANNUAL REPORT 2009-2010

The State Board of Education is the eligible agency which has jurisdiction over Career and Technical Education programs in Maine. It has designated the Career and Technical Education (CTE) Team, a sub-team of the Maine Department of Education PK-Adult team, as the staff for administering the programs under the Perkins IV Act. The CTE team is comprised of a state director of Maine Career and Technical Education, seven consultants, one vacant consultant position, and four support staff. The staff has oversight of the CTE programs statewide and reviews local applications and performance reports, including those from the Maine Community College System (MCCS). They also provide technical assistance to the field and each professional staff member acts as a liaison to three or four of the local secondary CTE schools. The CTE Team works with the broader PK-Adult Team which is made up of academic consultants and others that provide assistance to high schools with regard to their academic standards.

Postsecondary programs operate under the aegis of MCCS's Center for Career Development. MCCS is the eligible recipient for postsecondary Perkins funds.

Career and Technical Education is available to all secondary students in Maine through a statewide network of twenty-seven CTE centers and regions. The major difference between the centers and regions is their governance. The local school board governs the CTE centers while a cooperative board comprised of superintendents and school board members from the sending districts governs the regions.

Maine has developed a framework which organizes its programs around career clusters. All of the CTE programs are categorized by the Classification of Instructional Program (CIP) codes. The schools offer a variety of Trade and Industry programs in the traditional CTE classroom and community setting. The students receive required academic training in their respective sending schools with some required academic indicators integrated within the CTE setting. There are many articulation/dual enrollment agreements and work experience opportunities for all programs which allow students to receive college credit for part of their high school CTE experience. These can lead to direct entry into the work force, a technical certificate from a community college, or an associate degree.

Implementation of State Leadership Activities Required Use of Funds:

1) Conducting an assessment of the vocational and technical education programs funded under Perkins IV; Secondary

In order to receive Perkins IV funds, schools must participate in either a New England Association of Schools and Colleges (NEASC) or a Maine Department of Education (MDOE) comprehensive school review (CSR). Maine currently has 21 CTE schools participating in the MDOE CSR and only 6 CTE schools that are NEASC accredited. Many schools have dropped the NEASC accreditation due to the cost of membership and the cost of the onsite visits.

MDOE has developed a self-study and site review process that reviews schools on a 10-year cycle:

- Decennial site visit - a comprehensive review of CTE programs and school-wide standards by a visiting team of 9-15 members.
- Five year site visit – a review of the status of recommendations made during the decennial site visit to articulate additional recommendations as preparation for the next decennial review.

Key components of the Comprehensive School Review process include:

- An orientation of the review process presented to the school by MDOE consultants
- A school self-study the year prior to the decennial review
- A 4-day site visit to the school for the review itself. The visiting team, consisting of MDOE consultants and instructors/administrators from other Maine CTE schools, looks at programs, curriculum (including rigor, academic integration, and postsecondary articulation), instruction, assessment, equipment, facilities, school climate, and community involvement
- A final written report provided to the school with commendations and recommendations for improvement

Schools that choose to be reviewed using the MDOE review process are required to provide two teachers per year to participate as members of the visiting team in the review of other CTE schools.

Schools opting for accreditation by NEASC do so with the understanding that an MDOE CTE consultant must be included as a member of the visiting team and that a copy of the final report be submitted to the MDOE.

Local Plan: Each year there is an in-depth review of each local plan, including a financial review, before any money is allocated. The local plans must meet all elements of a checklist that have been developed for plan reviews. In addition, an annual desk audit is required. Maine has a web-based application and reporting system for the local education agencies for the submission of local plans and the website is structured so that progress reports are linked to the local plan's proposed expenditure of funds. Maine Department of Education requires that each school develop a program evaluation tool to review all CTE programs within the local school on an annual basis.

Program Proposal Review: All new secondary CTE program proposals must go through an intensive application review process and approval prior to implementation. Programs must meet the elements of Maine Department of Education Regulation 232, Standard Criteria for Maine Secondary Vocational Education Programs, before they are approved. This document is being revised in 2010-2011.

Review by Program Advisory Committees: Each program within a school must have a Program Advisory Committee (PAC). With the development of the Perkins IV State plan, Maine now requires the following of its Program Advisory Committees: meet at least annually; membership must include teachers, business and industry partners, secondary and postsecondary constituents, students and other interested stakeholders; review current curriculum, suggest and approve changes to curriculum and course offerings and provide feedback on the successes or failures of each program; review current program assessments to ensure that the technical skills required for the program are assessed and have a third party endorsement; conduct a comprehensive examination of the standards guiding the programs and the assessments to be used to determine technical skill attainment (national skills standards, state standards, or locally developed standards); review the program using a locally developed common evaluation tool and develop or review a plan to move the program to nationally recognized technical skills standards and assessments where they exist or state certifications/licensure.

Postsecondary – MCCS: As required by the MCCS Board of Trustees, each MCCS program must be reviewed by the Trustees every five years. In addition, an assessment tool was developed by the Academic Deans to be used consistently each year by the program's Advisory Committees across all programs and all colleges as they conduct their annual reviews.

2) Developing, improving, or expanding the use of technology in career and technical education;

Secondary

Each of the secondary programs is required to have a program advisory committee. These committees annually review the technology and equipment needs for each program. Locals also use Perkins funds for acquiring and updating technology and equipment. In FY 10, 30% of all Perkins dollars sent to the locals was used to upgrade or purchase new technology and equipment. Each school is required to participate in a school wide review using either NEASC or the state review process. An important component in these reviews is verifying that the equipment and technology needs of the program are current. Local Maine businesses generously provide some of the equipment and technology for our programs. Several of the programs are using a National Standard for their skill area and must adhere to the required equipment and technology for program certification. Programs are allowed to use Perkins dollars to keep their programs certification ready. The federal equipment guidelines are adhered to as a condition for Perkins funding. Maine has developed an Essential Programs and Services (EPS) funding formula for CTE that is yet to be implemented; equipment costs and national program certification costs are considered in the funding formula.

Postsecondary – MCCS

Each program of the MCCS is reviewed annually by its Program Advisory Committee to assure that current technology is being utilized. Perkins, State and local funds are used to update programs to keep technology current. During the 2009 – 2010 academic year, Perkins funds were used for technology updates in the following programs at various MCCS colleges: Allied Health; Architectural and Civil Engineering; Automotive Technology; Building Construction ; Technology; Computer Aided Drafting and Design; Culinary Arts; Digital and Graphic Design; Electrical and Automation Technology; Electrical Technology; Engine Specialist; Heavy Equipment Maintenance; Machine Tool Technology; Medical Assisting; and Refrigeration, Air Conditioning and Heating.

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

Secondary

The state directors' organization, Maine Administrators of Career and Technical Education (MACTE), assisted by the CTE Team in MDOE, hosts program area updates (tech updates) twice a year so that teachers have the opportunity to collaborate, discuss alignment of curriculum with industry recognized standards and credentials, and remain current in their fields. Most teachers have implemented the components of national standards that are appropriate for high school students. However, this has not been systemic and now the state, MACTE and CTE teachers are working on identifying national standards in each CTE content area to bring uniformity to the standards that are taught.

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

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Professional Development activities in Maine for Career and Technical educators during 2009 and 2010, for both instructors and administrators, were accomplished via a wide-range of meetings, trainings, institutes, conferences, courses, webinars, and workshops at the Local, State, and National levels. A list of these activities is as follows:

Professional Development; July, 2009-June, 2010	
Date	Description
'09-'10	NASDCTEC, NRCCTE-Webinars on Programs of Study, National Trends, etc (multiple)
'09-'10	Perkins CAR WebEx (multiple)
'09-'10	Maine Course Pathways Trainings, State-wide (3)
'09-'10	CTE Literacy Initiative (multiple trainings)
Monthly	MACTE Directors Meetings (various sties and Tandberg)
'09-'10	STEM Conference (multiple)
'09-'10	Maine State Board of Education meetings (multiple)
'09-'10	Access Database training-state and national (multiple)
'09-'10	Civil Rights workshops (multiple)
'09-'10	Standards-Based Education trainings (multiple)
'09-'10	New England Secondary School Consortium workshop (multiple)
'09-'10	FFA Student and Instructor Trainings (multiple)
'09-'10	Efficiency Maine (multiple)
'09-'10	OSHA Safety Certification for CTE Instructors (multiple)
'09-'10	CTE Tech Updates for Instructors (all ME CTE program areas; multiple)
Aug. '09	MACTE Directors Conclave, Bangor
Aug. '09	CTE New Instructor Boot Camp, UTC
Fall-Spring '09-'10	Husson University-CTE Teacher Preparation Courses: Emerging Trends in CTE; E-Portfolio for Teachers; Introduction to Effective Classroom Management; CTE Assessment I; Curriculum-based Instruction for the CTE Classroom and Shop; Introduction to CTE Classroom Teaching
Sept. '09	MDOE PreK-Adult Team Retreat (also semi-monthly)
Sept.-Oct.'09	Multiple Pathways Meetings-State-wide (4)
Sept 22-24	Maine Safety Conference
Oct. '09	CTE State-wide Conference (MACTE), LRTC, Lewiston ME
Nov. 09-May '10	CTE Comprehensive School Reviews (5&10 yr.) Region 8, Region 10, SCRTC, TCTC, Region 2
Nov. '09	Data Coach Training, LRTC (4 separate sessions)
Nov. '09	ACTE National Conference, Nashville TN
Nov. '09	VTECS/CTECS Workshop, Atlanta
Dec. '09	Data Quality Institute
Jan 6	Maine Safety Works OSHA inspections
Jan 12-14	Maine Wind Energy Seminar
January-June '10	Career and Education Development OER Research Project, Tandberg Video-Conferences
March '10	Comprehensive School Review Orientation-PATHS & MMTC
March '10 & various	Federal Compliance Methods of Administration, WRVC & CSRs; CMCC
March '10	NASDCTEC Conference, Washington DC
April '10	Career Pathways and Adult Ed, LRTC
April-May '10	Career and Education Development Committee., MSAD #9, Farmington ME
April, '09	Math in CTE planning meeting (NASDCTEC)
May '10	ACTE Region I Conference, Bangor
May 7	Maine Business Expo
May '10	NACTIE Conference
May '10	Totally Trades Conference (girls in trades/technology)
May-June '10	Career and Education Development On-line Education Resources (Tandberg videoconferences)
June, '10	Maine Superintendents Conference, Portland
June '10	Enhanced Articulation Agreements- Development and Protocols, DOE
June '10	Brustein & Manasevit Perkins Federal Compliance Meeting, DOE

Postsecondary - MCCS

Assuring that the MCCS CTE faculty and staff are provided comprehensive professional development is essential for continued student success. During the 2009 – 2010 academic year MCCS college CTE faculty and/or staff attended Technical Workshops relevant to their instruction area including, but not limited to (activities vary by college): ACTE Conference; Best Practices in Teaching Workshops; Blackboard Training; LEED Certification; Degree Advancement Courses; Distance Education training; MediSim Training; Mentoring Programs; and Special Populations assistance training

4) Providing support for career and technical education programs that improve the academic and career and technical skills of students through the integration of academics with career and technical education;

Secondary

Career and Technical Education Mentor Training: MDOE CTE staff and MACTE continued to provide opportunities for teachers to learn about literacy strategies through the highly-successful CTE Literacy Mentor Network which is supported by consultants from Public Consulting Group's (PCG's) Center for Resource Management (CRM). Mentors were trained in content area literacy strategies, developed examples related to their specific CTE areas, and practiced co-facilitating professional development with colleagues using literacy workshop facilitation guides. Teachers who had been previously trained as mentors were provided the opportunity to take their own learning to a deeper level with the goal of embedding the strategies in their day-to-day teaching. The outcome has been a network of literacy mentors who are teaching other teachers how to use before/during/after reading, writing, and vocabulary development strategies within their CTE classes and have developed additional CTE examples of applications for the CTE literacy facilitation guide.

Promising Practices Statewide initiative: Maine CTE schools were invited to participate in an initiative to identify, support, and disseminate information about promising programs and approaches that improve literacy, rigor and relevance in CTE courses. These promising practices continued to be documented and made available on the www.schoolswork.org website.

Numeracy: Maine DOE investigated opportunities for teacher training to strengthen numeracy as part of the PK-12 curriculum and decided to proceed in 2010-2011 with the Math-in-CTE program of the National Research Council for Career and Technical Education (NRCCTE). Since 2008, Maine had sent seven math teachers, eight CTE teachers, one high school principal, and three CTE directors to introductory trainings on Math-in-CTE. These participants became the core of the 2010-2011 Maine Math-in-CTE planning committee. In June 2010, Maine signed a contract with NRCCTE for the first year of technical assistance in Math-in-CTE, addressing CTE program areas of Carpentry and Welding/Machine Tool. Participants scheduled for five-day July 2010 training included twenty Maine CTE teachers from fourteen CTE schools, along with their mathematics teacher partners from seventeen Maine high schools. In addition, seven Vermont teachers (four mathematics and three CTE teachers) agreed to attend, accompanied by their representative from the Vermont Department of Education. The July training was the first half of the ten days of professional development scheduled for the 10-11 school-year.

In the 2007-2008 year six Maine CTE schools originally received grant funding from the Maine Title II B funds. This grant was designed to partner higher education, high need LEAs and CTE schools. By 2009-2010 the number of CTE schools more than doubled, at 16 CTE schools participating in 12 partnerships. Additional funding will be made available over the next year.

Postsecondary - MCCS

The colleges of the MCCS incorporate general education courses into all CTE Associate Degrees. The general education courses taught to CTE students have the same rigorous requirements as the Associate in Arts Degree program. Based on MCCS System Policy and NEASC academic standards, all programs require a strong general education (academic) core. [Per MCCS policy all Associate in Applied Science degrees must have a minimum of 20-21 credit hours (approximately 1/3 of a program) in the general education/academic core areas and all Associate in Science degrees must have a minimum of 30 credit hours (approximately 1/2 of a program) in general education/core areas.] The liberal arts/general education faculty meets regularly with career and technical faculty to assess whether the students' general education needs are being met. All matriculated students are advised from admissions through graduation to ensure they have the basic skill necessary to be successful in all of their courses. Strengthening of core academic areas and student learning through an organized inventory of assessments assures that all graduates, regardless of program, demonstrate the characteristics of an educated citizen.

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

Secondary

The goal of education for high skill, high wage and high demand occupations through non-traditional programming is a high priority in the State of Maine and for our CTE centers and regions. Through an interactive process of reviewing the Non-Traditional Section of Perkins Grant Application, the CTE Team is able to project and map out the needs of the center and regions. This information informs our technical assistance efforts for schools in the areas of: (1) Regional technology and trades workshops and follow-up activities for prospective non-traditional students, (2) Technical assistance through a needs

assessment process administered by the State-wide Women, Work and Community organization, to include as-needed program development activities, and (3) Recruitment and retention workshops for centers, regions and school districts.

Maine CTE has also continued to encourage the development of Exploratory Learning Programs for its 9th and 10th grade population which provides an excellent opportunity for students to sample many different non-traditional pursuits.

Maine's gender equity coordinator has been funded and retained since the inception of the Perkins Act, even though this is no longer a requirement. This position, the Special Populations Coordinator, also serves as the team leader for the Methods of Administration On-Site Review described above, which is one of the tools used to foster gender equity in Maine schools. The position is also responsible for transition planning for secondary school and exploratory learning.

Postsecondary - MCCS

As the MCCS failed to meet our Nontraditional Completion measure during 2008-2009, the colleges of the MCCS implemented and/or improved strategies to keep nontraditional students through to graduation.

These strategies included, but were not limited to programs to: support nontraditional training and employment; heighten students' awareness of the occupational opportunities existing for both men and women in nontraditional areas; and provide the support services necessary for students to continue their education. This group of special populations is essential to Maine's economy as encouraging students to enter occupations that are high skilled, high wage or high demand is extremely important. Both Perkins and other funds are used to provide opportunity awareness to nontraditional occupations. The MCCS colleges in partnership with Women, Work and Community; Women Unlimited; MDOL; Maine Adult Education; and local and regional business and industry, encourage students to enroll in nontraditional occupation programs.

During the 2009 - 2010 academic year the MCCS met the nontraditional measures within 90% of the OVAE goals (20.04% for Participation and 19.02% for Completion). The MCCS Nontraditional Participation rate for females was 35.33% (far exceeding the 21.15% goal) and the MCCS Nontraditional Graduation Rate for females was 29.63% (far exceeding the 19.83% goal). As the occupations considered nontraditional for women tend to be high skill, high wage and high demand, Maine has focused nontraditional efforts on women. Outside of the Allied Health field, male nontraditional programs are generally lower wage and it is difficult to encourage men to enter these professions in today's economy.

Our reporting reflects the nontraditional occupational programs issued by the NAPE nontraditional crosswalk. As Maine is a State with ingrained occupational traditions and limited resources, it is difficult to break through occupational gender barriers. Some of the activities provided for nontraditional students included (activities vary by college): "Totally Trades" / "Totally Tools / Careers for the 21st Century" conferences to introduce students to nontraditional occupations and programs; a "Woman's Resource Center" in a college library with gender equity materials; campus displays on nontraditional programs; gender equity brochures and posters; Maine Tradeswomen's Conference participation; Nontraditional College Program tours for high school students; one-on-one meetings with the college Gender Equity coordinator; outreach activities in conjunction with area agencies to introduce potential students to the benefits of high-skill, high-wage occupational training and employment; professional development workshops to enhance faculty sensitivity to issues of gender bias; Women in Technology groups to provide mentors to incoming students; and a support network that enables students to persist and complete degree requirements.

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

Secondary

Each of the secondary and postsecondary CTE programs has program advisory committees (PACs) made up of parents, teachers, administrators and business and industry partners. These PACs meet at least once annually (with a suggestion to meet once a semester) to review current curriculum, suggest and approve changes to curriculum and course offerings and provide feedback on the success or failures of each program. Each CTE school is required, as a condition of Perkins funding, to make students aware of Pre-apprenticeship opportunities and to have contact with the MDOL Pre-apprenticeship program representative each school year. Each Approved Perkins grantee was required to have one CTE Program of Study (CTE POS) in place by July 1, 2008. These agreements needed to include the academics required to participate in CTE and to graduate, ready for the CTE program requirements and the course(s) at the postsecondary level that the program aligned with. This CTE POS requirement generated greater communication between the sending academic high schools, the secondary CTE schools and the postsecondary institutions. Each agreement was signed by all three parties. Many partnerships were formed and now many schools have several CTE POS with their academic and postsecondary affiliates.

Status of the Programs of Study in the State of Maine

In the State of Maine there are 26 Regions or Centers which offer Career and Technical Education programs at the secondary level. There is one additional school district that offers a small number of CTE programs in the far northeast of the State. These Programs of Study delineate a seamless link between rigorous secondary academics, CTE programs at the Centers and Regions, and post-secondary pathways at the seven Maine community college campuses. The following is a breakdown of the types of CTE programs that are represented in the submitted and approved Programs of Study: Accounting Systems Technology, Automotive Collision Repair, Automotive Technology, , Computer Electronics, Computer Technology, Building Construction Technology, Culinary Arts, Business Administration, Digital Graphics, Drafting, Early Childhood Education, Electrical Technology, Emergency Services, Health Occupations, Industrial Safety, Machine Tool Technology, Medical Careers, Medical Office Administration, Outdoor Resources, Welding. The complete list by Center or Region is as follows:

CTE Center or Region	Program Name	College
1) Bath RVC	Automotive Technology	CMCC
2) Biddeford RCT	Automotive Technology	CMCC
	Drafting	YCCC
3) Capital Area TC	Machine Tool Technology	KVCC
4) Caribou RATC	Computer Electronics	NMCC
5) Coastal Washington County IT	Culinary Arts	WCCC
6) Foster Tech Center	Automotive Technology	CMCC
7) Hancock County TC	Automotive Technology	CMCC
8) Lake Region VC	Automotive Technology	CMCC
	Business Office Technology	CMCC
	Construction Technology	CMCC
	Culinary Arts	CMCC
	Drafting and Design	CMCC
	Health Occupations	CMCC
9) Lewiston RTC	Automotive Technology	CMCC
	Early Childhood Education	CMCC
10) Mid-Maine TC	Automotive Collision Repair/Refinishing	NMCC
	Automotive Technology	CMCC
	Computer Technology	KVCC
	Digital Graphics	CMCC
	Early Childhood Occupations	KVCC
	Electrical Technology	NMCC
	Emergency Services	KVCC
	Medical Careers	CMCC
	Precision Machining	CMCC
11) MSAD 24, Van Buren	Machine Tool Technology	NMCC
12) Portland Arts & Technology HS	Precision Machining	SMCC
13) Presque Isle RTC	Accounting Information Systems	NMCC
	Business Administration	NMCC
	Early Childhood Education	NMCC
14) Region 2, Southern Aroostook	Early Childhood Education	NMCC
	Industrial Safety	NMCC
15) Region 3, Northern Penobscot	Computer Electronics	NMCC
	Medical Office Administration	NMCC
16) Region 4, UTC	Building Construction Technology	EMCC
17) Region 7, Waldo County	Computer Technology	KVCC
18) Region 8, Mid-Coast	Automotive Technology	CMCC
19) Region 9, Mexico	Automotive Technology	CMCC
20) Region 10, Brunswick	Automotive Technology	CMCC
	Early Childhood Development	CMCC
	Metal Fabrication/Welding	SMCC
21) Region 11, Oxford Hills	Automotive Technology	CMCC
	Building Construction	CMCC

22)	Sanford RVC	Computer Technology	YCCC
23)	Somerset RVC	Outdoor Resources	WCCC
		IST Accounting	KVCC
24)	St Croix RTC	Automotive Technology	WCCC
		Early Childhood Education	WCCC
		Health Sciences	WCCC
25)	St John Valley TC	Early Childhood Education	NMCC
26)	Tri-County TC, Dexter	Health Occupations	CMCC
		Metals Manufacturing	CMCC
27)	Westbrook RVC	Electrical Construction	NMCC

Postsecondary - MCCS

The colleges of the MCCS work closely with internal and external partners to ensure students meet all requirements of CTE program completion. Some of the activities funded through Perkins to assure student success include, but are not limited to (activities vary by college): academic advising; academic assistance; advising centers; and an automated advising/registration process; and career and transfer counseling; child care and transportation assistance; collaboration with Maine Department of Labor to provide apprenticeship opportunities. [During the 2009-2010 academic year the MCCS had over 330 students who were also participants in MDOL's Apprentice Program.] As a requirement of Perkins funding each Postsecondary CTE school must have contact with the MDOL apprenticeship program representative each school year and also have one CTE POS in place.

7) Serving individuals in state institutions;

Secondary

Maine continued to utilize 1% (\$62,355) of the Perkins State Leadership funds for State Correctional institutions. The funds were used to support the development of CTE programs of study at Maine's correctional facilities for youth. The Mountain View Youth Development Center has started an Advanced Employment Preparation Program. A Juvenile Program worker was hired to work with the program manager and JMG specialist. Core workplace ethics, foundational CTE skills and hands on CTE training in Facilities Maintenance and vocational interest areas relative to Building Trades and Small Engine Repair. Certificates of Completion are awarded upon successful completion of the program.

8) Providing support for programs for special populations that lead to high skill, high wage and high demand occupations;

Secondary

Education for high skill, high wage and high demand occupations for special population students continues to be important to Maine's CTE Centers and Regions. The Maine DOE CTE Team has helped foster this development through a series of initiatives:

- Providing review, information, assistance and compliance through the State Departments' Comprehensive School Review and the Methods of Administration On-Site Review that is performed as a collaborative process with the centers and regions on a periodic basis. This effort is supplemented further by the integration of the Special Populations Section of the Perkins Application and by reviewing and consulting with the schools in goal setting, best practices and accommodations.
- The strong relationships with the Maine Department of Labor-Division of Vocational Rehabilitation and the Maine Department of Special Services (Special Education) has provided program assistance in the areas of career planning through the transition section of the Individual Education Plan and job skill development with community agencies and employers.
- Providing targeted work to assist technical centers and partner high schools in addressing the need for a more timely and comprehensive enrollment goal setting and planning for the students with special needs.

Postsecondary – MCCS

Each college of the MCCS works with their Special Populations to assure all students are treated equally to successfully complete programs that lead to high skill, high wage and high demand occupations. To achieve this, members of special populations are encouraged to serve on student committees and are provided adequate support and accommodations to ensure program success at the colleges and throughout the System.

This reporting year, the MCCS has once again supported the efforts of those students identified as at risk or having any special needs by offering: assistive technologies; career and placement services; childcare and transportation vouchers; educational and career counseling; English as a Second Language courses; faculty and staff training; instructional software; interpreters; smaller-sized, basic skills courses; TRIO programs; tutors and study labs; and Women in Technology programs.

Self-identification continues to be encouraged through distribution of informational brochures and extensive orientation activities and workshops. The colleges also coordinate through liaisons with sending agencies and schools, including Career and Technical Regions and Centers, high school guidance offices, Vocational Rehabilitation, Workforce Development, the Department of Human Services and the Veterans Administration. During the 2009 – 2010 academic year 3,900 of the 7,559 (52%) CTE Participant students and 3,326 of the 6,509 (51%) CTE concentrator students self identified as special population students, in one or more categories, based on the definitions of Perkins IV. The majority of these students were economically disadvantaged. All identified students received services. (Special population count is unduplicated student count - many students have more than 1 special population status.)

9) Offering technical assistance for eligible recipients.

Secondary

The Maine DOE provides technical assistance to eligible recipients in a variety of ways. Each consultant is assigned as liaison to three-four CTE schools and attends program advisory meetings as requested; attends region/center advisory meetings as requested; provides assistance as schools develop their local plan; provides guidance and assistance as schools and programs align with national standards; provides guidance and assistance as schools develop new programs; provides guidance and assistance as schools prepare for their Comprehensive School Review; and reviews local plans and assisting schools in appropriate changes/modifications

Technical assistance was also provided to the schools in the form of face-to-face guidance in the development of the local Perkins IV applications. The CTE consultants meet monthly with the directors to provide direction and guidance on the work in schools. In addition, each liaison is familiar with the school and its needs as the local online grant application is completed and reviewed at mid-year and at year end.

Postsecondary - MCCS

The System Office of the MCCS, in collaboration with MDOE, provides technical assistance to the MCCS colleges in all areas of the Perkins grant. The Perkins Grant and Progress Reports are entered into an online grant system. The System Office also collects student level data from the MCCS colleges and the Perkins Grant Administrator provides all required support to assure valid and reliable data collection. During the 2009 - 2010 academic year the online grant system and process to improve data quality of the MCCS CARS data continued.

Implementation of State Leadership Activities Permissive Uses of Funds:

- ***Improving career guidance and academic counseling programs;***

Secondary

All Maine high school students have access to a guidance counselor for career and academic counseling at their home school. The CTE directors and student services/guidance personnel have frequent contact with these people. Partner sending school guidance staff often meet as members of the CTE center/region advisory committee.

The CTE Essential Programs and Service (EPS) funding formula due to be implemented in the future includes the allocation of funds for one guidance counselor/student services coordinator per 250 students. With eighteen of our twenty-seven schools enrolling more than 250 this means these schools will receive a State allocation for guidance/ student services.

Postsecondary – MCCS

Students receive regular and ongoing academic and career-related advising from faculty members in their programs.

Secondary

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

The secondary CTE centers/regions and Community College campuses are jointly responsible for developing and executing Articulation Agreements. Secondary and postsecondary faculties are partnering to identify competencies a student will need to successfully transition into the professional/technical program(s) being articulated. Secondary and postsecondary faculties will agree upon competencies to be examined for the courses to be articulated. They will jointly develop an Articulation Agreement listing the student requirements needed to achieve the articulated credits. Maine has three types of articulation agreements, CTE Programs of Study (POS), Articulation agreements, dual and escrow and enhanced articulation agreements. The schools are required to have one POS, a designated percentage of their programs articulated and 3 enhanced articulations during the 5 year grant period. The State also requires that a contact/position be identified by the individual postsecondary Community Colleges and the individual secondary CTE schools to be responsible for the facilitation, record keeping, and reporting on Articulation, Maine Enhanced Articulation and Program of Study Agreements.

IMPLEMENTATION DATE	% OF PROGRAMS THAT MUST BE ARTICULATED
July 1, 2009	10%
July 1, 2010	20%
July 1, 2011	30%
July 1, 2012	40%
July 1, 2013	50%

Enhanced Articulation in the State of Maine

During 2009-2010 development work has been done on a second Enhanced Articulation agreement in the Automotive Technology program but it has not been finalized. Another EA proposal in Electrical has been proposed by the Maine Administrators of Career and Technical Education (MACTE). Additionally, a meeting was held in June among all CTE stakeholders in the EA process to devise protocols for the development, submission, review and approval of these agreements.

Concerning the one existing Enhanced Articulation Agreement completed and formalized in the summer of 2008, of the 27 secondary CTE centers, regions, or schools, 21 offer Culinary Arts or Food Service programs. Additionally, five of the seven institutions which comprise the Community College System offer Culinary Arts or Food Service. This Enhanced Articulation Agreement development process, which was, provides a clear pathway for students to complete a Culinary Arts certification at the post-secondary level.

Postsecondary – MCCS

Articulation between secondary and postsecondary CTE programs is an important part of the Maine Perkins State Plan. To assist in this endeavor each college of the MCCS is required to have a position responsible for creating and renewing college to school articulation agreements and Perkins programs of study. In addition, the Academic Deans of the MCCS continued their work on the three required statewide Enhanced Articulation agreements of the five-year Perkins State Plan. During the 2009 – 2010 work began on the second Enhanced agreement. Due to many curriculum alignment obstacles, an agreement in Automotive Technology was abandoned after many hours of work. Because of the nature of CTE, curriculums at both the secondary and postsecondary level vary to meet the local community needs and this process is proving to be much more difficult than originally thought. As three enhanced agreements are required by the end of the Perkins IV Act, work will continue on the development of two additional enhanced agreements. In addition, each college must have college to school articulation for 10% of their CTE programs each year to have 50% by the end of the five-year Perkins State Plan.

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

Postsecondary – MCCS

The MCCS works closely with the University of Maine System and private four-year colleges in Maine to develop articulation agreements for MCCS programs. Most of these articulation agreements allow our students to enter four-year institutions with a junior (3rd year) academic standing.

- *Supporting career and technical student organizations;*

Secondary

Every secondary CTE school is required to offer students the opportunity to participate in a student leadership organization. Most of our schools participate in the National Career and Technical Student Organizations, FFA, FCCLA, HOSA, DECA, SkillsUSA and FBLA. Several schools offer more than one of these leadership groups to their students. Perkins dollars are used to grant each organization \$2,000 to use for leadership activities. The CTE state consultants provide technical assistance, leadership training and judging at the state competitions.

Postsecondary – MCCS

Currently two of our colleges, SMCC and WCCC, have CTSO programs (Skills USA) for their students. These programs compete in Skills USA competitions for postsecondary programs. Neither college used Perkins funding for their Skills USA students.

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

Secondary

Maine secondary and postsecondary schools expose CTE students to all aspects of industry through: business internships; classroom guest speakers from business and industry; clinical or experiential opportunities as part of the CTE

programs; continual enhancement of the CTE programs based on advancements in the field; co-op opportunities; engaged advisory committees; and job fairs.

Postsecondary – MCCS

The MCCS colleges support this effort through various means at each of the college which include, but are not limited to: clinical rotation for Health Sciences; cooperative work experiences; externships; field experience; field trips to business/industry settings; guest speakers who are active and current in their field; industry specific assignments; integration of industry based certifications and testing; learning experiences that follow and model industry standards and practices; offering of credit internships with area employers; and paid, on-the-job training.

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

Secondary

The following partnerships and activities support the ongoing collaboration between MDOE-CTE and industry.

Secondary Program Advisory Committees

- Secondary Program Advisory Committees meet annually
- Minutes on file for each AC meeting
- Membership(s) includes teachers, business/industry partners, secondary/postsecondary constituents, students and other interested stakeholders
- AC reviewed current curriculum(s)
- Program(s) nationally aligned
- Conduct a comprehensive examination(s) of the standards
- Program(s) create a plan for moving towards national standards and/or a Industry Recognized Credential
- Live Work policies
- On file; Live Work Policies been reviewed/updated; Expiration Date
- AC data collection process is being revised and integrated into the Perkins Application website.
- Articulation agreements, Enhanced Articulation Agreements and Programs of Study on file

Apprenticeship

- Expand pre-apprenticeship opportunities
- Develop an Expanded Model program to increase pre-apprenticeship activities between multiple CTE sites.
- Require that each secondary CTE school make students aware of Pre-apprenticeship opportunities
- Require that each CTE school have contact with MDOL Pre-apprenticeship program representative each school year

Industry Collaboration

- CTE is an active member of the Youth Transition Committee, which is part of the “Jobs for Maine’s Graduates
- CTE is an active member of the Maine Manufacturers Association Education Committee
- CTE is actively engaged developing new programs of interest in Wind Energy/Wind Turbine Repair Technology.
- CTE is engaged in creating a tasks/duties matrix between occupations
- CTE is lead department in expanding OSHA training for CTE instructors
- CTE is lead department in expanding industry related safety training for CTE instructors
- CTE is actively engaged in STEM partnerships within the CTE framework
- Future occupations to be explored: Biomass, Alternative Energy, Green Technologies, and traditional careers becoming more Green
- Collaboration connection for Maine’s Alternative Energy stakeholders, manufacturing and industry members to aid in the creation of national industry recognized assessments, standards and employment opportunities.
- Collaboration with industry to explore the possibility of providing Lead Safety Training for instructors
- Collaboration with industry to explore the possibility of providing GREEN construction practices for instructors
- Collaboration with a regional safety provider to offer discounted registration fees for CTE individuals
- Collaboration with OSHA Region One OTC to secure discounted price for training courses.
- Collaboration between one local region and MDOL to assist the CTE Region in becoming SHAPE awarded.

Maine currently has 24 secondary cooperative education CTE programs and satellite programs. Cooperative Education instructors are kept up-to-date on local labor laws and submit job training plans for each of their students. Job training plan submission, reviewed by Maine Department of Labor, as well as Maine Department of Education, helps ensure compliance with labor laws and inclusion of educational progress and goals at student work assignments. Recent accomplishments have included Cooperative Education teachers and CTE Directors approving the state recognized Work Ready certification administered by the Maine Departments of Education and Labor for use by all Maine Cooperative Education programs. Efforts are underway to strengthen teacher training through collaboration with Husson University.

Postsecondary

As a requirement of Perkins funding each Postsecondary CTE school must have contact with MDOL apprenticeship program representative each school year and also have one CTE POS in place. Adjunct faculty arrangements with the secondary schools are in place for most dual credit articulations.

Postsecondary collaboration

Local grantees will develop procedures to ensure coordination and non-duplication among programs: programs of study; local workforce boards; other state and federal agencies; and required collaboration with WIA.

The individual colleges continue to work with WIA to increase the employability of Maine's citizens through higher education. WIA offices in Maine provide support to students attending MCCA colleges and they maintain a supply of updated MCCA information to make them available to their clients. Maine's WIA annual report for 05-06 stated, "To assure that the needs of industry are met and students properly trained, plans include having faculty from both business and the educational system collaborating to teach needed skills. This effort will involve collaboration with the University, the Community College system, the Career Centers, and secondary schools." The colleges of the MCCA coordinate with WIA by having college administrators sit on local WIA boards and WIA member(s) sit on local college boards; local colleges work with WIA when major layoffs occur in the area to craft solutions for laid-off workers; and college administrators stay informed about emerging industries and the need to increase training capacity and seeks to respond to these issues.

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

Secondary

New programs: Between July 1, 2009 and June 30, 2010, eleven of the twenty-seven Maine CTE schools submitted a total of thirteen proposals for new programs. The proposals included several STEM related careers. In developing a new program proposal, schools were asked to indicate what national standards they wish to align the curriculum with, what industry credential students have the opportunity to earn, and is the new program supported by the local community. In addition schools were asked to indicate the post secondary articulation and/or dual enrollment agreements available. Schools provided labor market statistics and were encouraged to consider new and emerging technologies.

Exploratory Programs: Between July 1, 2009 and June 30, 2010, one Maine secondary CTE school submitted proposals for a new exploratory CTE program. An exploratory CTE program is a CTE program that offers a student the opportunity to explore at least four programs at the CTE region/center. The exploratory program is a component of a sequence of courses of the related specific CTE programs that are offered for exploration. These programs are typically offered to students in grades 9 and 10 in preparation for entry into a full CTE program at grade 11.

Postsecondary – MCCA

The colleges of the MCCA are always looking for ways to improve and expand CTE program courses in order to reach more students. Many colleges are looking to distance education to support students in rural Maine. During the 2009 – 2010 academic year Perkins funds were used to purchase a Tandberg Unit, Computers, Mobile Projector and Turning Point Technology Personal Response Devices to allow CTE courses to be offered in off-site locations. The Rural Initiative grant in 09-10 provided Basic EMT training to 40 students.

- *Developing valid and reliable assessments of technical skills;*

Secondary

Currently nineteen of the twenty-four Maine CTE secondary program areas are aligned with national or state recognized skills standards. MDOE CTE is working with the program area groups and with directors and curriculum leaders at the CTE schools to gather the frameworks and related technical competencies listed within the specific national standards. Appropriate technical skill assessments that align to the frameworks' competencies have been or are in process of being identified and piloted for final approval by the Maine Administrators of Career and Technical Education. MDOE is producing a MDOE-CTE Directory of Technical Skills Standards and Assessments to be available as a resource to CTE schools and partner high schools, students, and parents.

Programs not having a national or third party technical skill assessment rely on the State of Maine technical standards; students completing at least 80% of these standards and leaving secondary education during the reporting year will be reported to the Maine Department of Education on the state's student data base.

The data from the national or third party technical skill assessment is reported to the Maine Department of Education by each school on the State's student data base in the summer after the students leave the program in the reporting year.

Opportunities to demonstrate CTE technical skill attainment will be evaluated through the CTE program approval process, Maine's CTE Comprehensive School Review process, and the local Program Advisory Committee program review.

Postsecondary – MCCA

Each college of the MCCA works with their Special Populations to assure all students are treated equally to successfully complete programs that lead to high skill, high wage and high demand occupations. To achieve this, members of

special populations are encouraged to serve on student committees and are provided adequate support and accommodations to ensure program success at the colleges and throughout the System.

This reporting year, the MCCS has once again supported the efforts of those students identified as at risk or having any special needs by offering: assistive technologies; career and placement services; childcare and transportation vouchers; educational and career counseling; English as a Second Language courses; faculty and staff training; instructional software; interpreters; smaller-sized, basic skills courses; TRIO programs; tutors and study labs; and Women in Technology programs.

Self-identification continues to be encouraged through distribution of informational brochures and extensive orientation activities and workshops. The colleges also coordinate through liaisons with sending agencies and schools, including Career and Technical Regions and Centers, high school guidance offices, Vocational Rehabilitation, Workforce Development, the Department of Human Services and the Veterans Administration. During the 2009 – 2010 academic year 3,900 of the 7,559 (52%) CTE Participant students and 3,326 of the 6,509 (51%) CTE concentrator students self identified as special population students, in one or more categories, based on the definitions of Perkins IV. The majority of these students were economically disadvantaged. All identified students received services. (Unduplicated student counts)

- ***Developing or enhancing data systems to collect and analyze data on secondary and postsecondary academic and employment outcomes;***

Secondary

The Maine Department of Education contracts with the National Student Clearinghouse to obtain data on postsecondary students' enrollment status and achievements at educational institutions, which allows the department to determine the number of students who pursued postsecondary education, transferred to another school, and graduated as well as the students' concentrations of study following graduation from secondary educational institutions in the state. In addition, the department has hired a CTE Data and Technology Consultant, whose responsibilities include assisting in data collection, analysis, and use as well as assisting in the development of state and local improvement plans based on state- and local-level data. Further, the department continues to develop a comprehensive statewide longitudinal data system whose future functionality is expected to include collection of PK–Adult data for CTE students as well as employment data upon graduation.

Student Placement incomplete

The secondary-level student placement data for 2009–2010 are incomplete due to contract negotiation with National Student Clearinghouse, the reporting entity with which MDOE contracts to obtain data on postsecondary students' enrollment status and achievements at educational institutions. The data reported for this year include information about students who graduated from a secondary school in the state, which was gathered from the Maine Department of Labor, including the number of students who entered the workforce, the number who entered military service, and the number who became self-employed. Because of the continued controversy surrounding the collection of student Social Security numbers for reporting purposes, only a percentage (32.4%) of students—those for whom the MDOE could provide Social Security numbers—were submitted to the Maine Department of Labor for matching purposes. The data provided by the Maine Department of Labor were extrapolated to estimate the total population for the disaggregated indicators of Employment and Military. However, postsecondary placement data could not be obtained from National Student Clearinghouse before this report's submission date.

Graduation Rate not available until February 2011

The graduation rate for CTE secondary students in the state could not be calculated in a timely manner for the new file specification, CTE Concentrators Graduation Rate, for the 2009–2010 school year. The data will be ready for reporting in February 2011. Because this is a new reporting requirement this year, data from a program year prior to program year 2009–2010 are not available.

Postsecondary – MCCS

The MCCS Perkins Grant Manager continues to work with the colleges to enhance our data collection capabilities. In addition the colleges are on a two-year cycle to change to a new Student Information System data structure. The MCCS does have a good working relationship with the Maine Department of Labor to allow employment outcomes to be matched.

- ***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

The Maine Department of Education requires that all new hires for CTE submit a certification application for conditional certification and a resume of work history. They must also register for and be fingerprinted. The superintendent of schools must submit a Conditional Affidavit for conditional teacher certification which is renewed if the following requirements are met:

Year 1 – Take and pass Praxis I Test – Pre-Professional Skills Test (PPST); complete an approved course for “Teaching Exceptional Students in the Regular Classroom”

Year 2 – Take and pass Praxis II Test

Year 3 – Take and pass Principles of Learning and Teaching Test (PLT)

The applicants must also hold a valid Maine certificate or license as required by State law or rule to practice the craft or trade to be taught. Please also refer to question #3 under the “Required Use of Funds” section.

Postsecondary – MCCS

The colleges of the MCCS actively recruit for career and technical education in a variety of ways: advertisements in newspapers, professional and academic journals, as well as through industry-related relationships and associations. Proportionally, fewer of the instructors in the trade and technical occupations programs entered academia through academic channels. Most enter, instead, from their positions in business and/or industry. Personnel without an academic background take courses in teaching and also receive assistance from their peers. These individuals require a great deal of development in making the transition to becoming educators.

• *Supporting occupational and employment information resources.*

Secondary and Postsecondary

The PAC members keep the teachers and administrators apprised of industry needs. The CTE schools must address local, regional and State economic development needs in their local CTE plans and update them on an annual basis. When a secondary CTE school proposes a new program, it must perform a needs assessment and it must convene a PAC and school advisory committee or a cooperative board to assist with the program development. This is required as part of the State’s program approval process for secondary schools. The MCCS has a similar approval process for all postsecondary new programs.

A member of the Maine Department of Education CTE team is the Commissioner’s designee to the Maine Jobs Council which is Maine’s Workforce Investment Act Board.

Information about Maine’s economic development needs and new and emerging industries is available from the Governor’s Economic Development Strategy which is on the website for Maine’s Department of Economic and Community Development <http://www.econdevmaine.com>. The Maine Department of Labor posts comprehensive labor market information on its website www.maine.gov/labor. Both of these websites are easily accessible to the schools.

On an annual basis the Maine Jobs Council, as the State Workforce Investment Board, will review data from the Center for Workforce Research & Information (CWRI)- formerly Labor Market Information (LMI) and generate a targeted list of occupations, thus allowing Competitive Skills Scholarship Program (CSSP) funds to be spent on related training. The Bureau of Employment Services through the CWRI will provide information on High Skill, High Wage jobs in Maine. Maine Department of Labor will make this information available on their website.

Representatives from the Maine Department of Education CTE Team, CTE directors, and postsecondary staff attend and participate in State and national conventions to attain information on current or emerging occupational opportunities.

Progress in Developing and Implementing Technical Skill Assessments

Secondary

As previously mentioned, nineteen of the twenty-four Maine CTE secondary program area groups are aligned with at least one nationally or state recognized skills standard. MDOE CTE is working with the remaining tech groups to facilitate the technical skills standards selection process. MDOE CTE is also working with all program area groups to facilitate the selection of assessments that best align with the technical skills standards. The following time frame is in place for the standards and assessment implementation process:

1. July 1, 2010 – June 30, 2011: Maine secondary CTE centers and regions will continue the process of selecting the 1-2 standard sets for each of their programs as discussed and agreed upon in tech updates. MDOE CTE will work with the programs that have not yet selected any standards.
2. July 1, 2011 – June 30, 2012: Common state-wide standards in each secondary CTE program area state-wide (1 – 2 per program) will be determined, adopted and implemented by all Maine CTE centers and regions.
3. July 1, 2012 – June 30, 2014: Common state-wide assessments (1-3 per program) will be selected for all state-wide selected standards at all secondary Maine CTE centers and regions. These will be adopted and in use in all programs. Programs lacking national or state certified assessments will have assessments developed or an existing rigorous, industry endorsed, third party assessment selected. Industry Recognized Credentials will be identified.

The table below summarizes the state’s current implementation of technical skills standards and assessment:

<u>ME CTE MACTE TECH GROUP AND CIP CODES</u>	<u>INDUSTRY RELATED STANDARD</u>	<u>TECHNICAL SKILLS ASSESSMENT (BEING PILOTED)</u>
Agriculture/Horticulture		

<u>ME CTE MACTE</u> <u>TECH GROUP AND CIP CODES</u>	<u>INDUSTRY RELATED STANDARD</u>	<u>TECHNICAL SKILLS ASSESSMENT</u> <u>(BEING PILOTED)</u>
Agriculture, General 01.0000	National Council for Agriculture Education (NCAE), Plant Systems and Natural Resource Systems	NOCTI
Agriculture Mechanics 01.0205	NCAE Power, Structural & Technical Systems	
Applied Horticulture 01.0601	NCAE Plant Systems	
Natural Resources Mgt. & Policy 03.0201	NCAE Natural Resource Systems	
Parks, Recreation & Leisure Facilities 31.0301	American Canoe Association Whitewater Canoeing AND Swiftwater Rescue Credentialing Standards	
Auto Technology 47.0604	1. National Automotive Technician Education Foundation (NATEF) Four Core (Electrical, Engine Performance, Brakes, Suspension & Steering) AND 2. State of Maine License Inspection Technician	1.NATEF 2.State of ME License Inspection 3.NOWE 4.ASE/AYES/Ford AAA test
	NATEF General Service Technical Standards and State of Maine License Inspection Technician	1.NATEF 2.State of ME License Inspection
Auto Body 47.0603	NATEF Painting & Refinishing	1.NATEF 2.I-CAR
Building Trades		
Carpentry 46.0201	1. National Center for Construction Education & Research (NCCER) Core, Carpentry 1&2 OR 2. National Association of Home Builders (NAHB) Residential Construction Academy Skills Standards	1.NCCER 2.NOCTI
Mason/Masonry 46.0101	NCCER Core & Masonry Level 1	
Plumbing 46.0503	NCCER Core & Plumbing Level 1 and International Association of Plumbing and Mechanical Officials Uniform Plumbing Code	APMO/NCCER
Business Studies: 52.0201; 52.0302; 52.0401; 52.0407; 52.0408; 52.0701; 52.1801; 52.1803		
Child Care 19.0709	1. National Association for Education of Young Children (NAEYC) 2. Maine Roads to Quality 3. American Red Cross CPR and First Aid	NOCTI
Composite Manufacturing /Materials Engineering 14.1801		
Computer Repair/Install		
Computer Installation & Repair 47.0104	1. Computer Technology Industry Association (CompTIA) A+ Essentials OR 2. Cisco Certified Entry networking	1.A+ 2.IC3 3.Apple 4.Cisco

<u>ME CTE MACTE</u> <u>TECH GROUP AND CIP CODES</u>	<u>INDUSTRY RELATED STANDARD</u>	<u>TECHNICAL SKILLS ASSESSMENT</u> <u>(BEING PILOTED)</u>
	Technician Standards	5.CCENT 6.CCNA 7.MSOS/Server/Admin
Information Technology 11.0103		
Cooperative Education 99.1000	WorkReady™	
Culinary Arts 12.0503	1.National Restaurant Association Education Foundation (NRAEF) ServSafe and ProStart 2.American Culinary Federation Education Foundation (ACFEF)	1.ServSafe 2.NOCTI
CTE Special Needs Employ- ability Skills (Diversified Occupations) 99.7000	ACT Work Keys	
Drafting		
Drafting, General 15.1301	State Technical Standards	1.NOCTI 2.SkillsUSA
CAD/CADD Drafting and/or Design Technology/Technician 15.1302	State Technical Standards	
Mechanical Drafting 15.1303	State Technical Standards	
Electrical	NCCER, NHBI	
Electrician 46.0302	1.NCCER Electrical Standard will include NCCER Core Level 1 and Level 2 2.National Association of Home Builders (NAHB)	
Electrical/Electronics Equipment Installation and Repair, General 47.0101	1. NCCER Electrical Standard will include NCCER Core Level 1 and Level 2 2.National Association of Home Builders (NAHB)	
Pre-Engineering 15.0000		
Wood Harvesting/Heavy Equipment/Commercial Driving		
Heavy Equipment/Diesel Mechanic Repairer 47.0302	1. NATEF Medium/Heavy Truck Program 2. State of Maine Licensed Inspection Technician	
Forest Harvest and Product Technology 03.0511	Certified Logging Professional Training Standards	
Construction Equipment Operator 49.0202	1. NCCER Core AND 2. Heavy Equipment Operations Level 1	
Truck / Bus / Other Commercial	1. Professional Truck Driver Institute	State of Maine Commercial Truck

<u>ME CTE MACTE TECH GROUP AND CIP CODES</u>	<u>INDUSTRY RELATED STANDARD</u>	<u>TECHNICAL SKILLS ASSESSMENT (BEING PILOTED)</u>
Vehicle Driver 49.0205	Entry level Tractor-Trailer Driver Standards AND 2. State of Maine commercial Truck License Standards	License exam
Graphic Arts		
Graphic Design / Commercial Art and Illustration 50.0402		1.SkillsUSA 2.Adobe
Graphic Design 50.0409	1. PrintEd Introduction To Graphic Communications OR 2.Adobe Certified Associate Standards	
Visual & Performing Arts 50.0101	The Arts Edge National Standards for Art Education	
Web Page, Digital/Multimedia & Information Processing 11.0801		
Graphic Communications, General 10.0301		
Desktop Publishing Equipment 10.0303		
Graphic/Printing Equipment Operator 10.0305		
Health Services		
Health Services/Allied Health/Health Sciences, General 51.0000	1.State of Maine Certified Nursing Assistant (CNA) 2.Certified Residential Medication Aide (CRMA)	1.State of Maine Certified Nursing Assistant (CNA) exam 2.Certified Residential Medication Aide (CRMA) exam
Nursing Assistant/Aide 51.1614	1.State of Maine Certified Nursing Assistant (CNA) 2.Certified Residential Medication Aide (CRMA)	1.State of Maine Certified Nursing Assistant (CNA) exam 2.Certified Residential Medication Aide (CRMA) exam
Medical Office Assistant 51.0710	American Medical Technologists (AMT)	
Biology Technician 41.0101		
Machine Tool 48.0501	National Institute of Metalworking Skills (NIMS) Machining Level 1 (Measurement, Materials & Safety; Planning, Bench-work & Layout; Manual	
Marketing/Sales: 52.0201; 52.0302; 52.0401; 52.0407; 52.0408; 52.0701; 52.1801; 52.1803	MarkEd Marketing Standards & National Retail federation Customer Service Standards	1.A*S*K 2.NRF
Multimedia		
Radio & TV Broadcasting 10.0202	State of Maine Technical Standards	
Cinematography & Film 50.0602	State of Maine Technical Standards	
Public Safety		
Security & Protective Services (EMT/Fire Science)	1. Maine Fire Training & Education Firefighter 1 & 2 OR	

<u>ME CTE MACTE</u> <u>TECH GROUP AND CIP CODES</u>	<u>INDUSTRY RELATED STANDARD</u>	<u>TECHNICAL SKILLS ASSESSMENT</u> <u>(BEING PILOTED)</u>
43.0000	2. National Highway Traffic Safety Administration EMT	
Criminal Justice/Police Science 43.0107	Maine Criminal Justice Academy curriculum Basic Law and Pre-Service	
Sheet Metal Technology/Sheet Working 48.0506		
Small Engine Repair		
Small Engine Repair 47.0606		
Marine Maintenance 47.0616	American Boat & Yacht Council Certification Standard	
Welding 48.0508	<ol style="list-style-type: none"> 1. American Welding Society (AWS) Limited Base Metal Thickness Plate Testing Standards OR 2. National Center for Construction Education & Research (NCCER) Core, Welding 1 & 2 	<ol style="list-style-type: none"> 1.AWS 2.NCCER 3.NOCTI

In May 2010 MDOE-CTE requested that all CTE directors submit their Common Program Evaluation Tools for review. Sample evaluation tools have been posted on the MDOE-CTE website as a resource and reference for CTE centers and regions to revise their evaluation tools. MDOE-CTE encourages centers/regions to use their program evaluation tools as a means to assist in creating work plans to ensure each Classification of Instructional Program code is fully aligned and has an assessment tool selected, per the state Perkins plan. Such tools can also serve to measure and gauge the alignment efforts, per program.

It is anticipated that Maine's student data system, Infinite Campus (IC), will have the capacity to gather the data on how many students took and passed at least one third party assessment.

Postsecondary – MCCS

During the 2008-2009 academic year the Academic Deans worked with their faculty and data collection people to collect student level data on more skill assessments. Data was collected in Welding, Respiratory Therapy, Electrical, Refrigeration, Air Conditioning and Heating, Precision Metals Manufacturing, Plumbing, Physical Therapy, Occupational Therapy, Nursing, Radiology, Medical Office Technology, Medical Assisting, Information Technology, Heavy Equipment Operations and Maintenance, Graphic Arts, Paramedicine and Diesel Hydraulic Technology.

In 2009, 1,598 CTE concentrators graduated.

- 1050 (67%) were in programs that are known to either offer skill assessments or prepare students for assessments, such as State licensure exams or National Assessments. Many of the End of Program assessments are taken post graduation and we are not able to collect data at the student level in a reliable manner due to privacy laws.
- All seven of the colleges were able to report student level data in the program areas listed above.
- Data was collected on skill assessments for 552 graduates (53%) and of those 531 (96.2%) passed.
- Of the assessments that we were able to collect student level data, 478 took End of Program Assessments, 74 took End of Course Assessments and 33 took both an End of Program and an End of Course Assessments (these students were counted with the End of Program students to assure an unduplicated student count).

The MCCS exceeded the CARS measure comparing students who took assessments to students who passed assessments. Our rate was 96.2%, although as more students are assessed and more assessment data becomes available we expect this percentage may decrease.

The MCCS System Office Perkins staff continues to meet with the colleges' Academic Deans to discuss their current timeframes for Skill Attainment/Assessment. Currently we know we are facing a difficulty in collecting post-graduate data (which most end of program assessments consist of) and accessing student level data. As programs are reviewed by their Program Advisory committees they discuss new Skill Assessments that may be appropriate. The MCCS has also been in discussion, in some program areas, with our secondary CTE partners to work toward consistency in Skill Assessment standards.

Implementation of State Program Improvement Plans

The State of Maine Career and Technical Education met core indicator 1S1: Attainment of Academic Skills-Reading/ Language Arts at more than the 90% threshold. The adjusted level of performance was set at 30%; the actual level of performance was 29.3%.

The State of Maine Career and Technical Education failed to meet core indicator 1S2: Attainment of Academic Skills-Mathematics at the 90% threshold. The adjusted level of performance was set at 30%; the actual level of performance was 24.4%.

The disaggregated categories of students for which there were quantifiable disparities or gaps in performance in English Language Arts were as follows:

READING	All CTE students who took SAT Reading test in Spring 2009	All students who met or exceeded	Percentages
Total	3075	900	29.3%
Female	1159	393	33.9%
Male	1916	507	26.5%
American Indian/Alaska Native	22	3	13.6%
Asian/Pacific Islander	25	8	32.0%
Black	70	20	28.6%
White	2932	862	29.4%
Displaced Homemaker	3	0	0.0%
Economically Disadvantaged	1173	276	23.5%
Limited English Proficient	51	7	13.7%
Migrant	0	0	0.0%
Single Parent	34	7	20.6%
Special Education	697	80	11.5%

Note: For ESEA, the MDOE reports only Reading scores, not Reading and Writing.

The disaggregated categories of students for which there were quantifiable disparities or gaps in performance in Math were as follows:

MATH	All CTE students who took SAT Math test in Spring 2009	All students who met or exceeded	Percentages
Total	3119	761	24.4%
Female	1169	289	24.7%
Male	1950	472	24.2%
American Indian/Alaska Native	23	4	17.4%
Asian/Pacific Islander	25	10	40.0%
Black	71	9	12.7%
White	2972	735	24.7%
Displaced Homemaker	3	0	0.0%
Economically Disadvantaged	1202	231	19.2%
Limited English Proficient	56	6	10.7%
Migrant	0	0	0.0%
Single Parent	34	2	5.9%
Special Education	713	62	8.7%

All Maine grade 11 students are administered the SAT for ELA and Math (with an augmentation) developed by the College Board. The SAT is described as a “reasoning” test, as distinguished from an “achievement” test. Similarly, the reading section is not so much a test of reading comprehension as it is a test of students’ critical reading skills. Most of the questions require that students go beyond a simple understanding of the text and make some inferences based on what they have read. They need to recognize that there is an author “behind” the reading passage and be able to assess the author’s point of view.

The students we are reporting on were administered the SAT in their junior year in late spring 2009. This means that our CTE students are tested on Reading/Language Arts and Mathematics before they have completed even one year of instruction in CTE; students who attend CTE only in their senior year are tested before they ever enter the CTE program. This makes it difficult for the CTE schools to have an impact on the students’ reading and math skills.

In Maine individual school systems are responsible for their own improvement plans. As 90% plus of Maine CTE students enter a CTE program at the beginning of grade 11, our CTE directors and instructors have little time to make an impact on reading/language arts scores.

Math 1S2 Improvement Plan

Maine began limited pilot work in 2008-2009 with the National Research Center for Career and Technical Education (NRCCTE) on the Math-In-CTE project. Only 1 CTE school and 1 high school participated. The teachers in two programs in the CTE school and the two high school teachers continued to work during the 09-10 school year and two of the teachers (1 CTE and 1 math) attended neighboring New Hampshire's summer training. The teachers presented at the Maine School Superintendents' Conference, the MACTE conference and in individual schools.

The Maine Department of Education and Maine Administrators of Career and Technical Education (MACTE) agreed in late summer 2009 to become more deeply involved in the NRCCTE work around math. In November 2009 Maine sent 5 CTE teachers from two different schools, 4 math teachers from 3 different high schools, 1 high school principal, 2 CTE directors, the Math-In-CTE lead from MDOE, and the MDOE math consultant to training in Nashville.

The teachers and administrators and MDOE worked with NRCCTE to offer Math-In-CTE training in the program areas of Building Trades/Carpentry and Metals/Welding/Machine Tool the week of July 12, 2010 with five follow-up days in the 2010-2011 school year. There was a total of 47 participants, 20 Maine Junior/Senior high school teachers, 20 Maine CTE teachers, 4 Vermont Junior/Senior high school teachers, and 3 Vermont CTE teachers. The participants represented 14 of Maine's 27 CTE Schools and 17 Maine high schools as well as the 3 Vermont CTE schools and 4 Vermont high schools. Maine is already in the planning stages to offer the training in mid July 2011 with Vermont teachers as participants. The program areas for the 2011-2012 year are Automotive Technology and Culinary Arts.

The change in CTE student achievement in both ELA and math will be slow as this takes time to spread and grow. There are no quick fixes to student underachievement in these areas.

Postsecondary – MCCS

During the 2009-2010 academic year the MCCS met all accountability measures, including 5P2: Nontraditional Completion, within 90% of the target goal. The improvement of 5P2 to 19.02% over last year's 14.22% was gratifying, but surprising. Maine continues to have a high percentage of women in nontraditional occupations and exceeds both of the Nontraditional goals set by OVAE and thus should be considered a success as programs categorized as nontraditional for females tend to be higher wage than those considered nontraditional for men.

The MCCS will continue to work with ALL nontraditional students, both men and women, to help them succeed through to graduation through:

- Articulation agreements with 4-year institutions that require graduation before transferring to the Baccalaureate institution.
- Developing internships for nontraditional students during their final semester to encourage them to complete their degree before transferring to a 4-year college.
- More flexible lab/class schedules and/or part-time educational options to accommodate students with external obligations.
- More scholarship opportunities.
- More exposure to the programs prior to enrollment to allow students to determine if the nontraditional profession they choose is right for them.
- More mentoring and coaching to help students succeed.
- An improved early warning system to identify students in need of assistance.
- More connections between nontraditional students and support staff through both face-to-face meetings and electronic media.
- More exposure of Gender Equity opportunities available on each campus.
- Develop marketing materials that are designed to draw women into trades programs (for example, highlighting a current female student in one of the programs).
- Expand recruitment efforts for nontraditional programs and use nontraditional alumni as speakers.
- Increase the use of student mentors and faculty advising.

The Gender Equity positions at each college will continue to work with students to help them succeed. Nontraditional support is an ongoing effort at all of the colleges so the actions are not new processes, but improved processes that will begin immediately and continue throughout Perkins IV. As noted above women in Maine are entering nontraditional programs and we see that as a success. We cannot direct men towards lower paying careers in this economy when both the students and the colleges are focused on high wage, high skill, high demand occupations.

Perkins Grant Distribution to Locals

The State of Maine is using the federally defined formula for secondary Carl D. Perkins distribution and any changes to school district boundaries will be reflected in the required data used-As in each previous program-year, the MCCS used the Perkins IV transition year plan, federally approved funding formula for disbursement of Perkins funds at the postsecondary level. Maine has developed a web-based application and reporting system for the local educational agencies for the submission of local plans and the website is structured so that progress reports are linked to the local plan's proposed expenditure of funds. The online grant system has been changed to reflect the changes in the Perkins legislation. As a final step in the grant administration process for the year, year-end Perkins Project Reports and budget reports were compiled, reviewed for accuracy and approved before new funds were approved.

<u>SECONDARY FUNDS</u>	FY10 TOTAL CENSUS DATA	CARRY OVER	TOTAL FUNDS CENSUS DATA FY2010
<i>Augusta</i>	\$141,281.00	5627	\$146,908.00
<i>Bath</i>	\$70,153.00	2794	\$72,947.00
<i>Biddeford</i>	\$98,704.00	3931	\$102,635.00
<i>Bridgton</i>	\$57,717.00	2299	\$60,016.00
<i>Calais</i>	\$37,236.00	1483	\$38,719.00
<i>Caribou</i>	\$32,498.00	1294	\$33,792.00
<i>Van Buran (Caribou Fiscal)</i>	\$8,367.00	333	\$8,700.00
<i>Dexter</i>	\$104,578.00	4165	\$108,743.00
<i>Ellsworth</i>	\$91,325.00	3637	\$94,962.00
<i>Farmington</i>	\$78,835.00	3140	\$81,975.00
<i>Lewiston</i>	\$210,850.00	8398	\$219,248.00
<i>Machias</i>	\$53,372.00	2126	\$55,498.00
<i>Portland</i>	\$221,635.00	8828	\$230,463.00
<i>Presque Isle</i>	\$38,330.00	1527	\$39,857.00
<i>Sanford</i>	\$167,378.00	6667	\$174,045.00
<i>Skowhegan</i>	\$93,456.00	3722	\$97,178.00
<i>St. John Valley</i>	\$24,977.00	996	\$25,973.00
<i>Waterville</i>	\$117,931.00	4698	\$122,629.00
<i>Westbrook</i>	\$137,608.00	5482	\$143,090.00
<i>Region 2</i>	\$45,262.00	1803	\$47,065.00
<i>Region 3</i>	\$55,516.00	2211	\$57,727.00
<i>Region 4</i>	\$184,147.00	7335	\$191,482.00
<i>Region 7</i>	\$61,061.00	2432	\$63,493.00
<i>Region 8</i>	\$79,728.00	3176	\$82,904.00
<i>Region 9</i>	\$52,209.00	2080	\$54,289.00
<i>Region 10</i>	\$72,003.00	2868	\$74,871.00
<i>Region 11</i>	\$48,904.00	1948	\$50,852.00
TOTAL SECONDARY	\$2,385,061.00	\$95,000.00	\$2,480,061.00
<u>POST SECONDARY FUNDS</u>			
<i>Maine CC System</i>	\$2,385,061.00	\$95,000.00	\$2,480,061.00
TOTAL TITLE I ©	\$4,770,122.00	\$190,000.00	\$4,960,122.00