

Consolidated Annual Report, Program Year 2012 - 2013

Maine

Step 3: Use of Funds: Part A

1. During the reporting year, did your state use Perkins funds to develop valid and reliable assessments of technical skills?

Yes

No Leadership funds were used, but other Perkins funds and other local funds are used at both the secondary and postsecondary levels to promote this work.

Secondary: During the past year MDOE CTE has gathered data from Perkins Annual Progress Reports and grant applications; tech group updates; comprehensive school review reports; and web-based research to identify appropriate end-of-program third party assessments for secondary CTE programs within Maine's 10 Career Clusters and 23 tech groups that span 61 CIPs (Classification of Instructional Program).

An industry-recognized credential is an industry license, certificate, or credential that may be awarded to a CTE student upon successful completion of an industry assessment. To date 69 assessments that offer attainable industry-recognized credentials have been identified, with at least one for 21 of the 23 tech groups. Pre-Engineering and Agriculture/Horticulture are the tech groups with no industry-recognized assessment/credential as yet identified.

An industry-related assessment is a test that was developed by a career and technical education organization. Many industry-related assessments have been identified, with at least one such assessment for 55 of the 61 CIPs. Maine will be working with a core group of CTE directors to form an assessment plan to ensure that all programs in Maine have assessments that are able to assess the student learning which occurs in the program and, when available and reachable, offers an industry recognized credential. Over the next academic year tech groups will meet to determine which assessment options best align to industry standards. Similar professional dialogues will take place at all CTE centers/regions. Selection of assessment will be reviewed for compatibility to the postsecondary options for increased program of study possibilities. All of these recommendations will be reviewed by the core assessment group. Recommendations for assessments will be submitted to MDOE CTE for final approval.

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:

The colleges of the MCCS have continued the Skill Assessments and Standards work that began with the implementation of Perkins IV. Given that many third-party assessments are taken post-graduation, difficulties exist in gathering data on assessments taken and results, including both the availability of that information once students have left the institution and privacy issues surrounding data collection.

2. During the reporting year, did your state use Perkins funds to develop or enhance data systems to collect and analyze data on secondary and postsecondary academic and employment outcomes?

Yes

No Leadership funds were used, but other Perkins funds and other local funds are used at both the secondary and postsecondary levels to promote this work.

Secondary: The Maine Department of Education contracts with the National Student Clearinghouse to obtain data on post-secondary students' enrollment status and achievements at educational institutions, which allows the department to estimate the number of students entering into college from our CTE schools. In addition, a CTE Data and Technology Consultant assists in data collection, analysis, and the development of state and local improvement plans by providing data analysis of state/local-level data. The consultant also is investigating a new method of collecting student labor related data. The department continues to develop a comprehensive statewide longitudinal data system (SLDS) whose future functionality is expected to include collection of PK-Adult data for CTE students as well as employment data upon graduation. The CTE portion is part of the SLDS "Phase III", which is being developed now and it's anticipated to be live by the next CAR reporting system.

Placement 5S1:

The data reported for school year 2012-2013 includes CTE graduated students information data collected using strategies like the Maine Department of Labor Unemployment Insurance wage records and FEDES wage records systems along with the National Student Clearinghouse (NSC) service.

Because of the ongoing controversy surrounding the collection of student Social Security numbers for reporting purposes, only a small percentage (17.23%) of students volunteered such information to the Maine Department of Education (MDOE) this school year.

In the past, the data provided by the Maine Department of Labor were extrapolated to estimate the total population for the disaggregated indicators of Employment and Military. The data returned from the National Student Clearinghouse and the employment datasets were jointed to calculate our placements target values. School year 2012-2013, this method has demonstrated itself to be unreliable because of the randomness of volunteered student Social Security numbers. Because of this new development and the need to adhere to our current agreed upon definitions, we elected to employ a margin of error to our calculations to remove the apparent duplications between datasets since students can only be counted one time.

The margin of error was found by using the Sample Size Calculator from <http://www.surveysystem.com> to find 4.85% is the margin of error for a Confidence Level of 99% if 587 students out of the total population volunteer their Social Security number. To improve the confidence level, the 1% was added to the calculated 4.85% to create the final margin of error adjustment factor of +/- 5.85%. Our combined dataset returned a total of 105.23% which then we applied our adjustment --5.85% because students can only be accounted for once, leaving a 99.38% placement rate. This value is similar to years past so we feel our calculations and methodology were accurate with the limitations with using students Social Service numbers. The National Student Clearinghouse findings at 43.75% is the most accurate value found so we extrapolated the difference between 99.38% and 43.75% to discover our employment value of 55.63%. The data from the Maine Department of Labor lacked any indicators related Advanced Training or Military. Both sections will be reported with a zero value with in the C158 and C169 EDEN Reports.

Postsecondary: The MCCS Perkins Grant Manager continues to work with each of the colleges to improve upon data collection processes and systems. All of the colleges employ the same student information system (SIS), though each employs it in slightly different ways. Through its work on a centralized data mart, MCCS Institutional Research has developed a methodology whereby standardized information can be extracted from the SIS for multiple purposes, including Perkins reporting. During the development phase, attention has been paid to ensuring that data required for all reporting is collected at the appropriate level of detail. In addition, the MCCS collaborates with the Maine Department of Labor to identify employment of its graduates and with the National Student Clearinghouse to determine transfers.

Consolidated Annual Report, Program Year 2012 - 2013

Maine

Step 3: Use of Funds: Part B

1. During the reporting year, how did your state assess the career and technical education programs funded under Perkins IV?

A position is partially paid with Leadership funds for secondary school reviews. In addition other funds were used to assist in the thorough review of CTE programs.

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 22 CTE schools participating in the MDOE CSR and only 5 CTE schools that are NEASC accredited. Many schools have dropped the NEASC accreditation due to the cost of membership and the cost of the on-site 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; and

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, review programs, curriculum (including rigor, academic integration, and post-secondary articulation), instruction, assessment, equipment, facilities, school climate, and community involvement.

A final written report provided to the school with commendations and recommendations.

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 has also developed a web-based grant reimbursement system. MDOE 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 go through an intensive application review process and approval prior to implementation. Programs must meet the elements of MDOE Regulation 232, Standard Criteria for Maine Secondary Vocational Education Programs, before they are approved. MDOE Regulation Chapter 232 is scheduled to be rewritten and approved by Maine State Legislature in an upcoming legislative session. Recent new programs that have been developed and approved are: Caribou-Culinary Arts, Lewiston-Travel, Tourism and Hospitality, Mid-Maine, Waterville-Mass Media (pilot), Region 2, Houlton-EMT, Region 11, Norway-CTE Academic (English), and Hospitality. Additionally, Region 10, Brunswick added an EMT component to their existing Fire Science program.

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 twice annually; membership must include teachers, business and industry partners, secondary and post-secondary 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 assessment; 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.

Secondary Special Populations: 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 provides 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.

Postsecondary – MCCS: As required by the MCCS Board of Trustees, each MCCS program must be reviewed either by a program accreditation board, in accordance to the specific program boards schedule, or by the Board of Trustees on a five year schedule. 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.

Postsecondary - Special Populations: Students in special populations are provided with an equal opportunity to pursue programs leading to high skill, high wage, high demand occupations. Support for such students is provided using Perkins and other funding, including, but not limited to the following: assistive technologies, career and placement services, childcare and transportation assistance, English as a second language courses, faculty and staff training, interpreters, smaller class sizes for remedial and intensive course work, TRIO programming, tutoring and study labs, and Women in Technology programs.

2. During the reporting year, how did your state develop, approve, or expand the use of technology in career and technical education?

Leadership funds were used to support Nontraditional Program activities and Math in CTE workshops. In addition, other funds were used to provide Professional Development opportunities as needed, for CTE faculty and staff to receive training in classroom technology such as smart boards, video conferencing, and current industry standard equipment.

MDOE works with Maine's Women, Work and Community to offer Totally Trades programs to CTE students. Through this program students were given the opportunity to use video technology to create their own video showing students in nontraditional fields. The Totally Trades workshops brought in technology from CTE programs so students could see and touch the equipment used in the field. This equipment includes: heavy machinery, fire trucks and firefighting equipment, law enforcement vehicles and equipment, skill trades equipment, and much more.

MDOE provides a Math in CTE training program to provide teachers and administrators with resources they need to promote STEM learning across all CTE programs.

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 12, 20% 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. CTE programs in Maine have chosen 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 is still exploring an Essential Programs and Services (EPS) funding formula for CTE and it is yet to be implemented; equipment costs and national program certification costs are considered in the funding formula.

Postsecondary – MCCS: In their annual reviews of MCCS programs, Program Advisory Committees determine whether up-to-date technology is being used. Through Perkins funding and other state and local sources, programs are able to purchase updated equipment to maintain labs. In the 2012-2013 academic year, the following programs at the various MCCS colleges acquired new technology using Perkins funds: Applied Marine Biology and Oceanography, Architectural and Civil Engineering, Automotive, Building Construction, Communications and New Media, Computer Technology, Culinary Arts, Diesel, Truck and Heavy Equipment, Electrical Lineworker, Electrical Technology, Electromechanical Technology, Emergency Medical Assisting, Medical Services/Technician, Energy Services Technology, Heating and Air Conditioning Technology, Heavy Equipment Maintenance, Horticulture, Hospitality and Tourism, Integrated Manufacturing, Nursing, Paramedicine, Power Sports Equipment, Precision Machining, Pre-Engineering, Radiography, Radiologic Technology, Refrigeration, Residential Electricity, and Welding.

The colleges within the MCCS continue to improve advising services to assist students through their academic careers and into the workforce. Several of the colleges have professional advisors available year-round, in addition to faculty advisors, with whom students meet regularly throughout the academic year.

3. During the reporting year, what professional development programs did your state offer, 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? On what topics?

Leadership funds were used to send a State level position to National FFA meetings, to provide Math in CTE, and Literacy workshops. Other funds were used to provide additional professional development as needed.

The National FFA meetings are attended by a State level position and the information is then shared with the agriculture teachers and staff in Maine's CTE Agriculture programs. These Maine CTE agriculture teachers/staff meet for professional development on a monthly basis. Through this professional development, they are kept updated on rules and regulations related to FFA and on funding and other opportunities available to them and their students through the agricultural industry and through FFA.

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 was 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. We are currently in the process of developing another literacy initiative which will incorporate the new Common Core standards within our curriculums and provide additional training on literacy strategies within the classroom.

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 <http://www.maine.gov/doe/cte/index.html> website.

Numeracy: Maine DOE continued efforts to strengthen numeracy through a one-day review training for teacher participants of the past two years of implementation of the Math-in-CTE program. The Math-in-CTE program was developed by the National Research Council for Career and Technical Education (NRCCTE). Since 2008, Maine has 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 Maine's original Math-in-CTE planning committee and provided four teacher leaders who worked under the mentorship of an NRCCTE consultant to deliver trainings. In its second year of implementation completed in May 2012, Maine DOE addressed CTE program areas of Culinary Arts and Automotive Technology with thirteen Maine CTE teachers from ten CTE schools, along with their mathematics teacher partners from ten Maine middle/high schools, as well as two Vermont teachers (one mathematics and one CTE teacher), accompanied by their representative from the Vermont Department of Education. In the coming year, Maine hopes to disseminate to past Math-in-CTE participants documentation prepared listing nation-wide websites that include Math-in-CTE lessons. Maine also hopes to investigate the utility of other, less professional development-intensive measures of enhancing mathematics/numeracy education in CTE.

Secondary

The state directors' organization, Maine Administrators of Career and Technical Education (MACTE), assisted by the CTE Team in MDOE, hosts program area updates (Technology 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. This is now systemic and has been codified by the Legislature so the state, MACTE and CTE teachers identified national standards where available in each CTE content area to bring uniformity to the standards that are taught.

Other Professional Development activities in Maine for Career and Technical educators during 2012 and 2013, 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 partial list of these activities is as follows:

Professional Development: July, 2012-June, 2013

All DOE-Commissioner's Meetings/Workshops

ASCD Workshop on Literacy

Brustein and Manasevit Perkins Federal Compliance Meeting, DOE (state-wide)

Common Core Literacy Conference

Conferences: ACTE, NACTEI, NASDCTEc, National Career Clusters Institute, National CTE Policy Seminar

Construction Expo of Maine

CTE and Literacy Workshops (2)

CTE Comprehensive 5 and 10 Year School Reviews and Pre-visits (State Perkins monitoring)

CTE Data/Infinite Campus Training

CTE New Instructor Orientation (Boot Camp) UTC and Eastern Maine Community College

CTE Team Meetings (monthly)

Career and Technical Education Consortium of States (CTECS) Conference

CTEDDI Jump Start Training

Data Quality Institute (DQI)

DECA, and SkillsUSA State Competitions, and Judging

Design Team Meeting

FFA Student and Instructor State-wide Trainings (multiple), State Convention and National Convention

Implementing the Common Core State Standards (national, multiple)

Maine CTE State-wide Conference

Maine Administrators of Career and Technical Education (MACTE) Meetings (monthly various sites and Tandberg videoconference)

Maine State Board of Education Alternative (CTE) Teacher Certification Stakeholder Group

Maine Logging Training Advisory Committee

Maine Safety Conference and Safety Works OSHA inspections

Maine State Board of Education meetings (multiple)

MDOE Learning Systems Team (multiple)

Maine Superintendents Conference

Math in CTE Initiative (statewide)

Methods of Administration Reviews, compliance with Federal Civil Rights Legislation (multiple)

New England Secondary School Consortium Convention

OSHA Safety Certification for CTE Instructors, 10 Hour and 30 Hour (multiple)

The Safety and Health Council of Northern New England: Seminars, Tradeshows, Conference

Technology Group Meetings in all Clusters and Pathways for National Industry Standards Adoption (state-wide)

Totally Trades conference

Webinars: NASDCTEc, NRCCTE, Perkins Consolidated Annual Report WebEx (multiple)

Workshops: CCSSO, and SCASS (multiple), Civil Rights Compliance (multiple)

Courses and degrees for pre-service or in-service CTE administrators and instructors offered at: The University of New England (MA), Husson University (BA), and Eastern Maine Community College (AA)

Postsecondary – MCCS: The continual professional development of the MCCS CTE faculty and staff is critical in assuring consistent student success. During the 2012-2013 academic year, CTE faculty and staff from each of the MCCS colleges participated in a variety of development activities relevant to their technical areas of expertise. The following is a sampling of these activities, varying by college: workshops offered during the faculty professional days preceding each semester; training on instructional technologies and advising practices, both in the classroom and online for CTE faculty, including e-portfolio for Building Construction, SimMom for Simulation Laboratory instructors, SolidWorks software training for Computer Aided Drafting and Precision Metal Manufacturing, and OnCourse student success program for CTE faculty; the purchase of instructional videos for the development of Medical Radiography clinical instructors; participation in external professional development courses pertaining to CTE content; attendance at state and national conferences of CTE industry associations, including MACTE and SkillsUSA; and continued education leading to further industry and academic credentials for CTE faculty in Accounting, Adventure Recreation, Building Construction, Heavy Equipment Operations, Medical Assisting, and more.

4. During the reporting year, how did your state provide 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?

A position is partially paid with Leadership funds for gender equity. In addition, other funds were used to provide increases support in this area.

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 centers 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.

Postsecondary – MCCS: Though the MCCS has recently met OVAE goals for non-traditional participation, it has experienced some difficulty in meeting the measure for non-traditional completion. Although males continue to fall well below the nontraditional completion goal, the MCCS nontraditional graduation rate for females was 36.1%, exceeding the 2012-2013 goal of 21.15%. Outside of the Allied Health fields, male nontraditional programs are generally lower wage, and it is difficult to encourage men to enter these professions. Therefore, many of our nontraditional outreach efforts are focused on women. Implementation of our improvement plan has positively impacted overall completion rates, and in the coming year, the MCCS will seek to focus even more attention on assisting all students pursuing nontraditional occupations to persist and complete their programs.

Our improvement plan, implemented in the 2012-2013 academic year and continuing currently, includes but is not limited to, the following strategies to assist both men and women succeed through the completion of their nontraditional programs: developing methods, materials, and partnerships aimed at introducing students to nontraditional occupational opportunities; identifying students academically at-risk early in the semester and connecting them with a variety of support services; establishing relationships and agreements with industry and 4-year institutions to provide internships and transfer articulations encouraging program completion; and increasing flexibility in scheduling to acknowledge the complex lives of students. This work is initiated by the Gender Equity Coordinators on each campus and overseen by their direct supervisors and reviewed and reported on by the Perkins Grant Coordinators to the MCCS Perkins Grant Manager.

Reporting is based on the NAPE nontraditional crosswalk. Maine does face some resistance to shifting gender roles in occupational areas, particularly in its rural, low-income locations. The following are several of the activities offered at MCCS colleges in an attempt to attract students to nontraditional programs (activities vary by college): Development of materials promoting gender equity choices and highlighting successful alumni; sponsorship of gender equity clubs, such as Women in Technology; hosting outreach activities with state agencies, like Women Work and Community, and Women Unlimited; coordination of open forums and discussion groups on the topic of nontraditional occupations; increasing direct advising of nontraditional students by both professional and faculty advisors; focusing recruitment efforts on nontraditional students enrolled at secondary CTEs; and hosting hands-on experiences for secondary students in nontraditional CTE programs.

5. During the reporting year, how did your state provide support for programs for special populations that lead to high skill, high wage and high demand occupations?

A position is partially paid with Leadership funds for MOA reviews. In addition, other funds were used to provide more support in this area.

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: Students in special populations are provided with an equal opportunity to pursue programs leading to high skill, high wage, high demand occupations. Support for such students is provided using Perkins and other funding, including, but not limited to the following: assistive technologies, career and placement services, childcare and transportation assistance, English as a second language courses, faculty and staff training, interpreters, smaller class sizes for remedial and intensive course work, TRIO programming, tutoring and study labs, and Women in Technology programs.

Students are encouraged to self-identify and advocate for themselves, learning of opportunities for additional support through program promotion, orientation activities, and advising. The colleges also coordinate 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. Based on Perkins IV definitions, 44% of CTE concentrators and 45% of CTE participants enrolled in the Fall of 2012 identified themselves as belonging to one or more special populations groups. The vast majority of these fall into the economically disadvantaged category. All identified students received appropriate services.

6. During the reporting year, how did your state offer technical assistance for eligible recipients?

Leadership funds were used to pay for a support position to provide Perkins technical assistance and portion of a position for school reviews. Other funds are used, where needed, to assure the schools and colleges receive all technical assistance they need.

The support position is the first contact for CTE administrators, teachers, and staff for technical assistance for Perkins. This position provides online assistance for the Perkins grant, the financial reimbursement system, OSHA trainings, Math in CTE, and all other areas of CTE.

The school reviews cover all aspects of the CTE schools and programs. Administrators, teachers, and staff have the opportunity for face-to-face, email, and phone assistance with all aspects of their CTE programs. The 4-day site visit by a team, consisting of MDOE consultants and instructors/administrators from other Maine CTE schools, review programs, curriculum (including rigor, academic integration, and post-secondary articulation), instruction, assessment, equipment, facilities, school climate, and community involvement. At the end of the review, the school is provided with a report of the recommendations found during the review process. Schools receive on-going State level technical assistance to assure the recommendations are met within a timely manner.

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 assists 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 MCCS System Office, in collaboration with the MDOE, provides technical assistance to each of the MCCS colleges with regard to all aspects of the Perkins grant. Annual local plans and progress reports are entered into an online system for review and guidance. Each year, the online grant management system is reviewed for accuracy and ease of use. The System Office also collects student level data from each college, with the Perkins Grant Manager providing the necessary support to assure accurate and complete data collection.

7. Serving individuals in state institutions

Part I: State Correctional Institutions

Amount of Perkins funds used for CTE programs in state correctional institutions:

55236

Number of students participating in Perkins CTE programs in state correctional institutions:

20

Describe the CTE services and activities carried out in state correctional institutions.

Secondary: Maine continued to utilize 1% 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. Teachers focus on safety training and basic vocational skills. No certificates are awarded as students do not complete an entire program in any pre-vocational areas. They do complete specific topics that would be part of a CTE course curriculum in the areas of small engines, building trades and culinary arts. Jobs for Maine's Graduates (JMG), a contracted service at MVYDC, provides job readiness training for GED recipients and for any high school students who desire assistance upon reintegration. The Perkins funds were used to purchase a CAD program for the building trades and to contract for services with Women Unlimited to offer 3 training programs for NCCER certifications. Two instructors also took the NCCER certification training and can offer the certifications to students in-house in the future.

Part II: State Institutions Serving Individuals with Disabilities

Amount of Perkins funds used for CTE programs in state institutions serving individuals with disabilities:

0

Number of students participating of Perkins CTE programs in institutions serving individuals with disabilities:

0

Describe the CTE services and activities carried out in institutions serving individuals with disabilities.

In Maine the Corrections funds are utilized in our Youth facilities.

8. During the reporting year, did your state use Perkins funds to support public charter schools operating career and technical education programs?

No

9. During the reporting year, did your state use Perkins funds to support family and consumer sciences programs?

No

10. During the reporting year, did your state use Perkins funds to award incentive grants to eligible recipients for exemplary performance or for use for innovative initiatives under Sec. 135(c)(19) of Perkins IV?

No

11. During the reporting year, did your state use Perkins funds to provide career and technical education programs for adults and school dropouts to complete their secondary school education?

No

13P. During the reporting year, did your state use Perkins funds to provide assistance to individuals who have participated in Perkins assisted services and activities in continuing their education or training or finding appropriate jobs?

Yes

No Leadership funds were used, but other Perkins funds and other local funds are used at both the secondary and postsecondary levels to promote this work.

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 MDOE CTE team is the Commissioner's designee to the State Workforce Investment Board (SWIB) 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. The MDOE CTE team also reviews data from the Center for Workforce Research and Information within the Maine Department of Labor <http://www.maine.gov/labor/cwri/pubs.html>. On an annual basis the SWIB reviews data from the Center for Workforce Research and Information (CWRI) - formerly Labor Market Information (LMI) - and generates 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 provides information on high skill, high wage jobs in Maine, which the Maine DOL makes available on their website.

Representatives from the MDOE CTE Team, CTE directors, and postsecondary staff attend and participate in State and national conventions to obtain information on current or emerging occupational opportunities.

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Maine

Step 3: Use of Funds: Part C

1. During the reporting year, how did your state provide 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?

Leadership funds were used to pay for positions at the State level to provide workshops and in addition, other funds were used to increase the amount of support provided in this area.

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 was 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. We are currently in the process of developing another literacy initiative which will incorporate the new Common Core standards within our curriculums and provide additional training on literacy strategies within the classroom.

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 <http://www.maine.gov/doe/cte/index.html> website.

Numeracy: Maine DOE continued efforts to strengthen numeracy through a one-day review training for teacher participants of the past two years of implementation of the Math-in-CTE program. The Math-in-CTE program was developed by the National Research Council for Career and Technical Education (NRCCTE). Since 2008, Maine has 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 Maine's original Math-in-CTE planning committee and provided four teacher leaders who worked under the mentorship of an NRCCTE consultant to deliver trainings. In its second year of implementation completed in May 2012, Maine DOE addressed CTE program areas of Culinary Arts and Automotive Technology with thirteen Maine CTE teachers from ten CTE schools, along with their mathematics teacher partners from ten Maine middle/high schools, as well as two Vermont teachers (one mathematics and one CTE teacher), accompanied by their representative from the Vermont Department of Education. In the coming year, Maine hopes to disseminate to past Math-in-CTE participants documentation prepared listing nation-wide websites that include Math-in-CTE lessons. Maine also hopes to investigate the utility of other, less professional development-intensive measures of enhancing mathematics/numeracy education in CTE.

Postsecondary – MCCS:

All MCCS CTE Associate Degrees and most Certificate programs include a combination of both academic and technical content, providing the CTE student with a well-rounded educational experience, as mandated by MCCS policy and NEASC accreditation standards. MCCS policy dictates that approximately one-third of all Associate in Applied Science programs and one-half of the Associate in Science programs are comprised of general education courses. Faculty teaching liberal arts courses confer regularly with CTE faculty to assure that students are developing the appropriate skills to succeed both academically and in their chosen technical field. Advisors, both within the faculty and the administration, assist students in navigating all aspects of their programs and in seeking help as necessary. Ultimately, it is each college's goal to graduate students who can be considered well educated.

2. During the reporting year, how did your state support 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.

A position at the State level is paid with Leadership funds to facilitate partnerships. In addition, other funds were used to provide increased support in this area.

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 successes 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 50% of their programs articulated with Postsecondary education and have at least one CTE Program of Study (CTE POS) in place by July 1, 2008. These agreements include the rigorous academics required to participate in CTE and to graduate proficient in the CTE program requirements and the course(s) at the postsecondary level. The CTE POS requirement has generated greater collaboration between the partner academic high schools, the secondary CTE schools and the postsecondary institutions. Each agreement is signed by all three parties. Many partnerships are formed and a number of the schools have developed and executed several Programs of Study with their academic and postsecondary partners.

Secondary Partnerships with Industry

Collaboration between several local region and MDOL to assist the CTE Region in becoming SHAPE awarded. Collaboration with OSHA Region One OTC to secure discounted price for training courses. CTE is an active member of the Maine Manufacturers Association Education Committee. CTE is lead department in expanding industry related safety and OSHA training for CTE instructors. On file; Live Work Policies been reviewed/updated; Expiration Date Programs create a plan for moving towards national standards and/or a Industry Recognized Credential Programs nationally aligned Require that each CTE school have contact with MDOL Pre-apprenticeship program representative each school year Industry Collaboration and make students aware of Pre-apprenticeship opportunities

Status of the Programs of Study in the State of Maine

In the State of Maine there are 27 Regions or Centers and one K-12 school which offer Career and Technical Education programs at the secondary level. 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. All CTE centers and regions are required to submit at least one Program of Study and are encouraged to develop and submit as many as possible. All schools will be required to have at least 20% of programs in Programs of Study by the next grant year. The following is a breakdown of the types of CTE programs that are represented in the submitted and approved Programs of Study: Accounting, 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, Machine Tool Technology, Medical Careers, Outdoor Resources, Welding. The complete list by Center or Region is as follows:

Maine Programs of Study Submissions FY 2011-2013

CTE Center or Region, Program Name, HS Partners, College Partner

Bath RVC, Automotive Technology, Boothbay, Lincoln, Morse, Wiscasset, CMCC

Biddeford RCT, (2) Automotive Technology, Drafting, Biddeford, Kennebunk, Thornton, Old Orchard Beach, CMCC, YCCC

Capital Area TC, Machine Tool Technology, Cony, Erskine, Gardiner, Hall-Dale, Monmouth, Richmond, Winthrop, KVCC

Caribou RATC, Computer Electronics, Ashland, Caribou, Easton, Fort Fairfield, Limestone, Presque Isle, Washburn, NMCC

Westbrook RVC, Electrical, Bonny Eagle, Gorham, Scarborough, Westbrook, Windham, NMCC

Postsecondary – MCCS: Each of the colleges of the MCCS has established and continues to cultivate relationships with educational and employment partners assuring that programs meet students where they are as incoming CTE students and follow a path to successful completion of course work and credentials. Perkins funding allows for some of the following student success initiatives: academic advising, tutoring, career and transfer counseling, childcare and transportation assistance, and educational assessment.

In addition, the Maine State Perkins Plan includes a requirement for each college to connect with the Maine Department of Labor to seek out and promote apprenticeships, as well as having an increasing number of Programs of Study in place between the colleges and secondary CTE centers.

Of the 7,997 CTE concentrators in 2011, 6,095 (75%) either graduated or remained in higher education. 4,054 of those students retained were enrolled in the same institution from Fall 2011 to Fall 2012, with 521 transferring to another institution. Of the 1,592 non-transferring graduates, X were employed based on a data match conducted by the Maine Department of Labor.

3. During the reporting year, did your state use Perkins funds to improve career guidance and academic counseling programs?

Yes

No Leadership funds are used for this activity, but local funds and other Perkins funds were used to provide students to both academic and career guidance.

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: The colleges within the MCCS continue to improve advising services to assist students through their academic careers and into the workforce. Several of the colleges have professional advisors available year-round, in addition to faculty advisors, with whom students meet regularly throughout the academic year.

4. During the reporting year, did your state use Perkins funds to establish agreements, including articulation agreements, between secondary school and postsecondary career and technical education programs to provide postsecondary education and training opportunities for students?

Yes

Leadership funds provide funding for a position at the State level to facilitate agreements between secondary and postsecondary and training opportunities for CTE students. In addition other Perkins funds and other local funds are used at both the secondary and postsecondary levels to promote this work.

Secondary

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: dual, escrow, and enhanced articulation. The schools are required to have a designated percentage of their programs articulated and three 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, 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

Two Enhanced Articulation agreements, between the participating Centers and Regions and the Maine Community College System, have been developed since 2009. The first was Culinary Arts, which is up for a three year review. The second, Electrical Technology, was proposed by MACTE and finalized in June 2012. Students who complete the basic requirements outlined in these agreements are eligible to receive anywhere from 3-6 escrow credits depending on which Maine community college they attend for completion of the articulated programs. The three year cycle for Enhanced Agreements was completed in 2012 for Culinary Arts so it was reviewed and renewed by all parties. According the State CTE plan a third Enhanced Articulation is due to be developed and executed during this Perkins grant cycle. During 2013, a Precision Machining Enhanced proposal was developed by the Maine Community College System. After much deliberation, changes to the required NIMS Level I standards to be covered by the agreement have been proposed by the Machine Tool Technology group for the secondary CTE programs and sent back to the Maine Community College System. It is anticipated that this agreement will be finalized during FY '14. Additionally a change in the agreement language from "Enhanced" to statewide articulation and the move away from escrow credits to dual credit/dual enrollment has been proposed by MCCA and accepted by MDOE.

Postsecondary:

The Maine State Perkins five-year plan includes articulation agreements as an integral piece, with requirements to establish and maintain individual college to CTE center articulations and programs of study, as well as three, system-wide enhanced articulation agreements. Each college has staff focused on articulation, making connections between college faculty and CTE programs, and the Academic Deans directly oversee the development of Enhanced Articulations. In 2012-2013, the first enhanced articulation in Culinary Arts was renewed after three successful years of implementation. Our second, in Electrical Technology, continues. A third, this one in Integrated Manufacturing, has encountered issues due to differing standards for available equipment. However, these are nearly resolved and a signed agreement is expected in the 2013-2014 academic year.

5. During the reporting year, did your state use Perkins funds to support initiatives to facilitate the transition of sub baccalaureate career and technical education students into baccalaureate programs?

Yes

No Leadership funds are used for this activity, but local funds and other Perkins funds were used to support initiatives to facilitate the transition of sub baccalaureate CTE students into baccalaureate programs.

Postsecondary:

The colleges of the MCCA work closely with the University of Maine System and other four year colleges in Maine and beyond to articulate MCCA CTE programs with their baccalaureate programs. Most articulation agreements guarantee junior (third year) standing at their transfer institution.

6. During the reporting year, did your state use Perkins funds to support career and technical student organizations?

Yes

Perkins target reserve and local funds are used to support student activities in Leadership conferences of CTSOs, but no leadership funds are used for this activity.

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 funds 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. The State Advisors for FBLA and FFA worked together to plan and deliver a joint leadership training for November 2012. Further such collaborative efforts are hoped for, however, scheduling will not permit these for November 2013.

2012-13 to plan a joint leadership training for November 2013 (other invited groups were not available). Such an effort could result in additional collaboration among students and leaders of these organizations, as well as some cost savings.

Postsecondary:

Two of the MCCS colleges, SMCC and WCCC, participate in the Career and Technical Student Organization SkillsUSA, training and competing nationally each year. Perkins funding is not currently used by this organization. In addition, gender equity and CTE student clubs exist on most campuses, some of which are funded in part with Perkins money.

7. During the reporting year, did your state use Perkins funds to support career and technical education programs that offer experience in, and understanding of, all aspects of an industry for which students are preparing to enter?

Yes

No Leadership funds were used, but other Perkins and other local funds are used to support career and technical education programs that offer experience in, and understanding of, all aspects of an industry for which students are preparing to enter, but no leadership funds are used for this activity.

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; job fairs; and pre- apprenticeship opportunities. The MDOE-CTE field tested a mentorship program to help increase more real life opportunities.

Postsecondary:

It is important to expose students to all aspects of their chosen field while they are still in a position to decide if it's truly their calling and to appropriately prepare them for the workplace. The MCCS colleges do this through a variety of means, including but not limited to: clinical rotations for health science programs, cooperative work experiences, externships, field experiences, field trips to business/industry settings, guest speakers currently working in the field, industry specific assignments, integration of industry based certifications and testing, learning experiences modeling industry standards and practices, credit bearing internships with area employers, and paid, on-the-job training.

8. During the reporting year, did your state use Perkins funds to support partnerships between education and business, or business intermediaries, including cooperative education and adjunct faculty arrangements at the secondary and postsecondary levels?

Yes

Leadership funds provide funding for a position at the State level to promote partnerships. In addition other Perkins funds and other local funds are used at both the secondary and postsecondary levels to promote this work.

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

PAC reviewed current curriculum(s) Articulation agreements, Enhanced Articulation Agreements and Programs of Study on file Apprenticeship Collaboration between several local region and MDOL to assist the CTE Region in becoming SHAPE awarded. Collaboration with OSHA Region One OTC to secure discounted price for training courses. CTE is actively engaged in STEM partnerships within the CTE framework CTE is an active member of the Maine Manufacturers Association Education Committee CTE is an active member of the new Robotics Institute of Maine CTE is lead department in expanding industry related safety and OSHA training for CTE instructors Exploring expanding pre-apprenticeship opportunities PAC Membership(s) includes teachers, business/industry partners, secondary/postsecondary constituents, students and other interested stakeholders Minutes on file for each PAC meeting On file; Live Work Policies been reviewed/updated; Expiration Date Program(s) create a plan for moving towards national standards and/or a Industry Recognized Credential Program(s) nationally aligned Require that each CTE school have contact with MDOL Pre-apprenticeship program representative each school year Industry Collaboration and make students aware of Pre-apprenticeship opportunities Secondary Program Advisory Committees Secondary Program Advisory Committees meet annually Maine currently has 10 secondary cooperative education CTE programs and satellite programs.

Postsecondary:

The Maine State Perkins Plan indicates that each postsecondary CTE school receiving Perkins funding be in contact with the Maine Department of Labor apprenticeship program annually. The extension plans also require that increasing numbers of Programs of Study are established between secondary and postsecondary CTE programs. Dual credit articulations often involve approval of secondary CTE faculty as adjuncts. These collaborative efforts help to ensure curricular coordination and non-duplication.

Business partnerships also exist between colleges and industry partners, who sit on program advisory boards to guide curriculum, visit classrooms to interact with students, and participate in career guidance, internship/externship programs, and cooperative education. Colleges have representatives on local workforce investment act boards, and WIA members participate on college boards in an effort to keep informed and connected. The MCCS System's own Center for Career Development keeps up-to-date on emerging industry and expanding companies in the state.

9. During the reporting year, did your state use Perkins funds to support the improvement or development of new career and technical education courses and initiatives, including career clusters, career academies, and distance education?

Yes

Leadership funds provide funding for a position at the State level to facilitate this work. In addition other Perkins funds and other local funds are used at both the secondary and postsecondary levels to promote this work.

New programs: Between July 1, 2012 and June 30, 2013, four of the twenty-seven Maine CTE schools submitted five proposals for new programs. 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 whether the new program is supported by the local community. In addition schools were asked to indicate the post-secondary articulation and/or dual enrollment agreements available or will be pursued and Programs of Study available. Schools provided labor market statistics and were encouraged to consider new and emerging technologies. 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.

Exploratory Programs: An exploratory CTE program is one 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. Two CTE schools have submitted new exploratory program applications and these should be included in next year's report.

Postsecondary:

Improving and expanding CTE programs to meet the needs of students, industry, and the state of Maine is a priority of the colleges of the MCCS. Both physical and virtual expansion is happening for many of the colleges' programs in an effort to reach as many residents as possible.

10. During the reporting year, did your state use Perkins funds to provide activities to support entrepreneurship education and training?

No

11. During the reporting year, did your state use Perkins funds to improve 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?

Yes

Leadership funds provide funding for a position at the State level to assist with this work. In addition other Perkins funds and other local funds are used at both the secondary and postsecondary levels to promote this work.

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)

Additionally, the applicants must hold a valid Maine certificate or license as required by State law or rule to practice the craft or trade to be taught. All new CTE instructors must meet a five year recency requirement in occupational experience. Finally CTE teachers also must meet minimum education attainment requirements and have paid employment hours, between 4000 and 8000, depending on the educational level, in the occupational program to be taught. A number of changes in the certification requirements have been proposed for CTE instructors and been forwarded to the State Board of Education and ultimately to the State Legislature. Maine is currently working to make changes to these requirements for CTE instructors.

Postsecondary:

Recruitment at the colleges of the MCCS use a variety of methods to recruit career and technical faculty, including, but not limited to newspaper and online advertisements, professional and academic journals, and through industry relationships and associations. As a rule, CTE faculty at the community colleges often enter teaching through the expertise they have gained in business and industry, rather than coming through academic channels. Development of teaching skills takes place on the job, via credit course work, non-credit trainings, peer to peer assistance/mentoring/review, and regular faculty development workshops.

12. During the reporting year, did your state use Perkins funds to support occupational and employment information resources?

No

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Step 4: Technical Skills Assessment

Provide a summary of your state's plan and timeframe for increasing the coverage of programs entered above.

Note - not all programs will have all of the assessments indicated in the table above at all secondary CTE schools and all Community Colleges. Maine is working towards like assessments, but that work is in its beginning phase.

Secondary: During the past year MDOE CTE has gathered data from Perkins Annual Progress Reports and grant applications; tech group updates; comprehensive school review reports; and web-based research to identify appropriate end-of-program third party assessments for secondary CTE programs within Maine's 10 Career Clusters and 23 tech groups that span 61 CIPs (Classification of Instructional Program).

An industry-recognized credential is an industry license, certificate, or credential that may be awarded to a CTE student upon successful completion of an industry assessment. To date 69 assessments that offer attainable industry-recognized credentials have been identified, with at least one for 21 of the 23 tech groups. Pre-Engineering and Agriculture/Horticulture are the tech groups with no industry-recognized assessment/credential as yet identified.

An industry-related assessment is a test that was developed by a career and technical education organization. Many industry-related assessments have been identified, with at least one such assessment for 55 of the 61 CIPs. Maine will be working with a core group of CTE directors to form an assessment plan to ensure that all programs in Maine have assessments that are able to assess the student learning which occurs in the program and, when available and reachable, offers an industry recognized credential. Over the next academic year tech groups will meet to determine which assessment options best align to industry standards. Similar professional dialogues will take place at all CTE centers/regions. Selection of assessment will be reviewed for compatibility to the postsecondary options for increased program of study possibilities. All of these recommendations will be reviewed by the core assessment group. Recommendations for assessments will be submitted to MDOE CTE for final approval.

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: The colleges of the MCCS have continued the Skill Assessments and Standards work that began with the implementation of Perkins IV. Given that many third-party assessments are taken post-graduation, difficulties exist in gathering data on assessments taken and results, including both the availability of that information once students have left the institution and privacy issues surrounding data collection. Details on what information was successfully gathered appear below under the Skill Assessment section of the CARS narrative.

Enter the number of students assessed for technical skill attainment, and the total number of CTE concentrators reported for the program year. The percent of students assessed for technical skill attainment will be automatically calculated.

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Step 8: Program Improvement Plans

Extension Requested?

No

Required Program Improvement Plans

Directions: Your state has failed to meet at least 90% of the state adjusted level of performance for the core indicators of performance listed in the table below. Please provide a state program improvement plan addressing the items found in the column headings of the table below.

| Core Indicator | Disaggregated categories of students for which there were quantifiable disparities or gaps in performance compared to all students or any other category of students | Action step to be implemented | Staff member responsible for each action step | Timeline for completing each action step |
|----------------|---|---|---|--|
| 2P1 | This Goal was missed by .01% so the gap is not large. The Race and Ethnicity and Special Populations subcategories that were lower represent a small portion of the total and therefore are not quantifiable. | Improved early warning system to identify students in need of assistance | College Registration & Advising Staff | 10-15-14 |
| 2P1 | This Goal was missed by .01% so the gap is not large. The Race and Ethnicity and Special Populations subcategories that were lower represent a small portion of the total and therefore are not quantifiable. | Development of more internships for final semester CTE students | College Department Chairs | 12-31-14 |
| 2P1 | This Goal was missed by .01% so the gap is not large. The Race and Ethnicity and Special Populations subcategories that were lower represent a small portion of the total and therefore are not quantifiable. | Continued creation of articulation agreements with 4-year institutions requiring completion before transfer | College Career & Transfer Offices | 08-31-14 |
| 2P1 | This Goal was missed by .01% so the gap is not large. The Race and Ethnicity and Special Populations subcategories that were lower represent a small portion of the total and therefore | Expansion of recruitment efforts using alumni to draw realistic pictures of career fields | College Admissions Staff | 09-30-14 |

| Core Indicator | Disaggregated categories of are not quantifiable. | Action step to be implemented | Staff member | Timeline |
|----------------|---|---|-------------------------------|----------|
| 2P1 | This Goal was missed by .01% so the gap is not large. The Race and Ethnicity and Special Populations subcategories that were lower represent a small portion of the total and therefore are not quantifiable. | Increased use of student mentors and faculty advisors | College Department Chairs | 06-30-15 |
| 2P1 | This Goal was missed by .01% so the gap is not large. The Race and Ethnicity and Special Populations subcategories that were lower represent a small portion of the total and therefore are not quantifiable. | Increased use of student mentors and faculty advisors | College Department Chairs | 06-30-15 |
| 2P1 | This Goal was missed by .01% so the gap is not large. The Race and Ethnicity and Special Populations subcategories that were lower represent a small portion of the total and therefore are not quantifiable. | More connections between students and support staff through student life-cycle | College Advising Offices | 09-30-14 |
| 2P1 | This Goal was missed by .01% so the gap is not large. The Race and Ethnicity and Special Populations subcategories that were lower represent a small portion of the total and therefore are not quantifiable. | Increased flexibility of lab/class schedules | College Registrars | 11-30-14 |
| 2P1 | This Goal was missed by .01% so the gap is not large. The Race and Ethnicity and Special Populations subcategories that were lower represent a small portion of the total and therefore are not quantifiable. | Increased scholarship opportunities | College Financial Aid Offices | 06-30-15 |
| 1S1 | Male students performed less well than female students by a small percent, but overall all students need more help in literacy. | Provide a Literacy training to Directors and teachers. See detailed improvement plan below. | MDOE | 05-30-14 |

Secondary Program Improvement Plans

1S1 Academic Attainment Improvement Plan

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.

Currently the students we are reporting on were administered the SAT in their junior year in late spring 2013. (Maine will be moving to Smarter Balance assessments for Math and English in the near future.) As Maine does not have comprehensive CTE schools, CTE students receive their academic courses at their sending high schools and only their CTE coursework at the CTE schools. 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 as juniors and 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 career and technical education program at the beginning of grade 11 this gives our CTE directors and instructors little time to make an impact on reading/language arts scores.

ELA 1S1 Improvement Plan School Year 2014-2015

In May 2012 MDOE CTE launched the Literacy in Maine CTE project by identifying a cohort of ten CTE instructors with previous training in literacy instruction to participate in the Summer Literacy Institute in Augusta, Maine. The cohort subsequently met in November 2012 with the MDOE ELA Specialist to consider next steps in the Literacy in Maine CTE project, which include offering opportunities for continued professional development in instructional literacy strategies.

In the spring of 2013 MACTE (Maine Association of Career and Technical Education) contracted to provide two workshops in literacy to CTE faculty and staff. Both workshops received rave reviews from attendees. Maine hopes to see some results of these workshops as early as the 2014 CARS numbers. Another set of workshops is being planned for spring of 2014 to further develop literacy in all of our CTE programs. CTE has very little educational time to change the testing scores for students, but what little time we have is used to the fullest to help students succeed on whatever path they choose.

Maine is in the process of developing an academic Common Core Crosswalk to reinforce the academic learning received at the sending high schools. This crosswalk will link the Common Core State Standards which were adopted in English/Language Arts and mathematics beginning with the school year of 2012-2013. The Common Core state standards present a common platform across many states and efforts nationally to support a stronger implementation of standards than has been present in the past. This will result in higher quality resources and professional development for our teachers in Maine. For each of the following strategies and deliverables a member of the Implementing the Common Core Standards Team (ICCS) has been identified for the key responsibility. The team will be led by Dan Hupp and will meet with the national consortium three times a year through CCSSO and will meet regularly on an agreed upon schedule between meetings to monitor progress.

Local Program Improvement Plans

Secondary: Out of the 27 secondary schools, below is a list of the accountability measures that each school did not meet within 90% . As a State, secondary in Maine only missed 1S1. Most secondary locals have trouble meeting the academic goals as they do not have the students long enough to make a big difference in these areas. At the State level Maine will be offering professional development workshops in both Literacy and Math in CTE in the spring of 2014.

Augusta - Capital Area Technical Center :1S1- 6S1;

Bangor - United Technologies Center - Region 4 :1S1;

Bath - Bath Regional Career and Technical :1S1- 1S2- 3S1;

Brunswick - Maine Reg. Ten Technical High School - Region 10 :1S1- 1S2- 6S2- 3S1- 4S1;

Calais - St. Croix Regional Technical Center :1S1- 1S2;

Caribou - Caribou Regional Technology Center :1S1;

Dexter - Tri-County Technical Center :1S1- 1S2- 2S1- 3S1;

Ellsworth - Hancock County Technical Center :1S1- 1S2;

Farmington - Kenneth Foster Reg. Applied Tech. Ctr-SAD 9 :2S1;

Frenchville - St. John Valley Technology Center :1S1- 1S2- 6S1- 6S2;

Houlton - Southern Aroostook County - Region 2 :1S1- 1S2- 2S1;

Lewiston - Lewiston Regional Technical Center :3S1;

Lincoln - Northern Penobscot Tech.-Region 3 :1S1- 1S2;

Machias - Coastal Washington County Institute of Technology :1S1;

Mexico - School of Applied Technology - Region 9 :1S1- 1S2- 2S1- 6S1- 6S2;

Naples - Lake Region Vocational Center :1S1- 1S2- 3S1;

Norway - Oxford Hills Technical School -Region 11 :2S1- 3S1;

Portland - Portland Arts & Technology High School :1S1- 1S2- 2S1- 6S1- 6S2- 3S1- 4S1;

Rockland - Mid-Coast School of Technology -Region 8 :1S1- 1S2;

Sanford - Sanford Regional Vocational Center :1S1- 6S1- 6S2;

Van Buren - Van Buren Regional Technology Center - SAD 24 :2S1;

Waldo - Waldo County Technical Center -Region 7 :1S1- 1S2;

Waterville - Mid-Maine Technical Center :1S1- 2S1- 6S2;

Westbrook - Westbrook Regional Vocational Center :1S1- 1S2- 2S1;

Postsecondary: Two of our seven postsecondary institutions failed to meet at least 90 percent of agreed upon local adjusted levels of performance, Southern Maine Community College (SMCC) and Washington County Community College (WCCC). In both cases, measure 2P1 was not met. At WCCC, 3P1 was also not met. Improvement plans will be implemented at the local level for these measures.