

# Consolidated Annual Report, Program Year 2016 - 2017

## 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

Perkins Leadership funds are used at the State level support activities in Maine to assist with the development of valid and reliable technical skill assessments and aligning those assessments to current CTE program curriculums and standards.

Secondary: To meet Perkins requirements for the use of technical skill assessments, the Maine DOE and State CTE Directors' Association, MACTE (Maine Administrators of Career and Technical Education), continued work on determining which third-party industry-recognized assessment or certification test each program will utilize. The Maine DOE and the MACTE standing committee of Directors and Student Services Coordinators reviewed assessment and credential options and made recommendations for required end-of-program assessments for each program to MACTE for acceptance. The next steps for this process will be for MACTE to formally accept these assessments and devise a mechanism for the systematic and timely review of assessments for currency and validity.

During the 2016-2017 academic year, technical skill assessments were chosen for Automotive Technology (CIP 47.0604); Certified Nursing Assistant (CIPs 51.0000, 51.1614); Drafting (CIPs 15.1301, 15.1302, 15.1303); Electrical (CIP 46.0302); CTE Employability Skills (Maine CIPs 99.7000, 99.8000); Emergency Medical Services (CIPs 43.0000, 51.0904); Farm and Industrial Mechanics (CIP 01.0205); Firefighting (CIPs 43.0000, 43.0203); Graphic Arts (CIPs 10.0305, 50.0402, 10.0303, 50.0409, 10.0301, 50.0102); Machine Tool/Precision Machining (CIP 48.0501); Plumbing (CIP 46.0503); Pre-Engineering (CIP 15.0000); and Welding (CIPs 48.0508, 48.0506).

Postsecondary: Although no leadership funds were used, the colleges of the MCCS have continued the Skill Assessments and Standards work that began with the implementation of Perkins IV.

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 are as follows:

Of the 2,405 CTE graduates in the 2015-2016 academic year:

1,205 (50.1%) completed programs known to offer assessments or prepare students for assessment

Across all seven colleges, data was available and collected for 731 students (unduplicated count), who took end of program and/or end of course assessments

Of these 731 graduates, 703 passed (96.2%)

Overall, a reported 856 assessments were taken, and 829 passed (96.8%).

#### 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

Perkins Leadership funds are used at the State level to support a position that is the first contact for all aspects of CTE. This position provides support to the CTE team, including the Data Consultant. Activities we are unable to fund with our limited Leadership funds are completed using alternative funding sources. Our CTE data consultant is paid with our State Perkins match funds.

**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, the CTE Data and Technology Consultant aids in data collection, analysis, and the development of state and local improvement plans by providing data analysis of state/local-level data. The consultant continues to investigate new methods of collecting student labor related data. Along with the new methods of collecting student data, the consultant will also be advising on the automated services employed in these collections. Such automated service need to be vetted to ensure data is not lost in future extractions.

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 information system during the school year.

The data reported for school year 2016-2017 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.

This is the process used to calculate the placement, 5S1, for FY17.

Because of the ongoing controversy surrounding the collection of student Social Security numbers for reporting purposes, only a small number of the total student population volunteers their SSN information to the Maine Department of Education (MDOE). As for this collection year, an automated process for securing student Social Security numbers failed which led to the removal of ninety percent of Maine's normal Social Security data extractions. MDOE-CTE will report the data but the overall sample size and confidence levels could not be reached to ensure accurate reporting of 5S1.

The student data that is submitted are sent to the Maine Department of Labor for matching. MDOL reports back the percent of that small group that are employed and we use that percentage in addition to the National Student Clearinghouse percentage to calculate an estimated number of employed.

The data from the Maine Department of Labor lacks any indicators related to Advanced Training or Military. Both sections are reported with a zero value with in the C158 and C169 EDEN Reports.

Postsecondary: 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. The online grant management system is continuously 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.

# Consolidated Annual Report, Program Year 2016 - 2017

## 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 23 CTE schools participating in the MDOE CSR and only 4 CTE schools that are NEASC accredited. Many schools have dropped the NEASC accreditation due to the cost of membership and the cost saving benefits of the on-site MDOE-CTE visits.

MDOE has developed a self-study and site comprehensive school review process that reviews schools on a 3/6 year cycle:

During 2016-2017 the Maine Department of Education CTE team conducted 4 Mid site visits – a review of the status of recommendations made during the 6 Year site visit to articulate additional recommendations as preparation for the next full review. Schools visited were Region 3, Northern Penobscot Technical Center in Lincoln; Bath Regional & Technical Center in Bath; Portland Arts & Technology Center in Portland; and Waldo County Technical Center in Waldo.

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 3.5 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 is provided to the school with commendations and recommendations.

Schools that choose to be reviewed using the MDOE review process are required to participate as members of the visiting team in the review of other CTE schools. The participation schedule has been developed by the CSR Coordinator to ensure each school has an opportunity to benefit from this process. Schools opting for accreditation by NEASC do so with the understanding that an MDOE CTE consultant will be present for a period of time to answer any state specific questions. In addition, it is a requirement that final NEASC report be submitted to the MDOE CSR Consultant. Schools who are NEASC schools do receive MOA and Perkins monitoring on-site visits in accordance to the risk assessment schedule.

Local Plan: Each year there is an in-depth review of each local Perkins plan, including a financial review, before any money is allocated. The local plans must meet all elements of a checklist that has 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 also uses a web-based grant reimbursement system. MDOE requires that each school use locally developed Common Yearly Evaluation Tool to review all CTE programs within the school. This assures that all programs within each school are reviewed on the same criteria.

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 once annually with a recommendation to meet 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: Each program of the MCCS is reviewed utilizing a common assessment tool developed by the Academic Deans to serve all colleges. In conjunction with the Deans, Program Advisory Committees and Department Chairs gather information annually on student success and preparedness. By policy, their findings are presented on a five-year cycle to the MCCS Board of Trustees. In addition, many programs with individual accreditation have more rigorous review requirements at more frequent intervals.

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

Leadership funds are used to support positions maintain the information and resources available on the Maine DOE CTE website, set up meetings via distance technology, and assisting team members in upgrading their work computers and mobile phones.

Secondary: The school review position oversees the school review process to ensure the schools have access to available technology. The comprehensive school review verifies that the equipment and technology needs of the program are on par with the National standards and/or certification requirements. 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 help keep their programs up to certification standards. The federal and state 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.

Locals also use Perkins funds for acquiring and updating technology and equipment. In FY 16-17 over 36% of all Perkins dollars sent to the locals was used to upgrade or purchase new technology and equipment.

Postsecondary: 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 2016-2017 academic year, the following programs at the various MCCS colleges acquired new technology using Perkins funds: Adventure Recreation, Allied Health, Architectural and Engineering Design, Automotive Technology, Business Administration/Management, Communications & New Media, Composite Science and Manufacturing, Computer Technology, Construction Technology, Criminal Justice, Culinary Arts, Diesel, Truck, & Heavy Equipment, Dietetics & Nutrition, Early Childhood Education, Education, Electrical Automation, Electrical Lineworker Technology, Electromechanical Technology, Emergency Medical Services, Fine Woodworking and Cabinetry, Graphic Communications, Health Information Technology, Heating, Air Conditioning, & Refrigeration, Heavy Equipment Operations, Horticulture, Hospitality Management, Information Technology, Medical Assisting, Medical Radiography, Mental Health, Nursing, Physical Therapy Assistant, Power Sports Equipment, Precision Machining/Manufacturing, Residential/Commercial Electricity, Respiratory Therapy, Surgical Technology, and Welding.

**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?**

Perkins Leadership funds are used at the State level to support a position that reviews professional development for both the local grants and MDOE and in addition a position that is the first contact for all aspects of CTE. Leadership funds were also used to send a State level position to National FFA meetings and Academic Intersection workshops. Other funds were used to provide additional professional development as needed.

**Secondary**

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.

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.

MDOE offered CTE and academic intersection workshops to lay out the natural alignment of Maine ELA and math standards to CTE national or state industry standards. During the 2016-2017 year this process was completed for Auto Collision, Electrical, and Machine Tool. Another intersection workshop will be held in the 2017-2018 school year.

MDOE provides ongoing professional development opportunities on the use of the Maine Grant System online site. As this site can be cumbersome many hours are spent training CTE Directors and their staff on the best way to navigate the system.

Professional Development activities in Maine for Career and Technical educators during 2016 and 2017, 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 1, 2016-June 30, 2017: Advance CTE national conference, ACTE CareerTech Vision Conference, National Career Pathways Network conference, Maine CTE New Director workshop, National FFA Convention, Agriculture in the Classroom, Agriculture Trade Show, Apprenticeship Forward workshop, Brustein & Manasevit Perkins Federal Compliance Conferences, National CTE Policy Seminar, Annual Craft Fair-Associated Building Contractors (ABC), CTE and Academic Intersections Workshops in: Auto Collision, Machine Tool, Electrical, CTE Comprehensive 3 and 6 Year School Reviews and Pre-visits (State Perkins monitoring), CTE New Instructor Orientation (Boot Camp) UTC and Eastern Maine Community College, CTE Team Meetings (monthly), CTECs Community of Practice and Board Meetings, CTECs Assessment Development workshops, DECA, and SkillsUSA State Competitions and Judging, FFA Student and Instructor State-wide Trainings (multiple), FFA State Convention, Maine CTE State-wide conference for all instructors and administrators, Maine Administrators of Career and Technical Education (MACTE) meetings-monthly various sites and videoconference, MACTE Cost Modeling workshop Maine State Board of Education meetings (multiple), Methods of Administration Reviews (MOA), Title IX compliance with Federal Civil Rights Legislation training, National OSHA training, Maine Safety and Health Conference, The National Summit for Education Equity, tradeshow, Tech Group Meetings in all Clusters and Pathways for national industry standards and assessments (state-wide) Totally Trades Non-Traditional conference (various locations state-wide) Webinars: NRCCTE, Perkins Consolidated Annual Report WebEx (multiple), Civil Rights Compliance (multiple), Northern New England CTE conference (Vermont), Apprenticeship/WIOA Learning Exchange Webinar

Postsecondary: The continual professional development of the MCCS CTE faculty and staff is critical in assuring consistent student success. During the 2016-2017 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, advising practices, and first-year experience, both in the classroom and online for CTE faculty, attendance at industry-relevant conferences for and participation in continuing education opportunities leading to further industry and academic credentials.

**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?**

Perkins Leadership funds at the State level are used for a portion of a position for support of CTE Nontraditional and Special Population students and to provide funding to New Ventures Maine to offer Totally Trades workshops for eighth grade girls and to promote nontraditional programs at college and job fairs. During the 2016-2017 school year six Totally Trades programs were offered across the State. 625 students from 52 different schools attended these hands-on workshops.

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. During fiscal year 2016-2017 the new CTE, special populations education specialist worked to familiarize herself with CTE practices related to non-traditional and special populations. Significant time was spent attending local and national training events related to CTE nontraditional programs and students The National Summit for Education Equity hosted by National Alliance for Partners in Equity (NAPE), Title IX training hosted by the National Woman's Law Center, and local Totally Trades events hosted by New Ventures Maine.

Postsecondary:

The MCCS continues to encourage students to pursue and complete non-traditional programs in preparation for high skill/high wage occupations. Where we have experienced difficulty in the past and implemented improvement initiatives, particularly with regard to nontraditional completion, we are seeing progress. However, overall participation lagged in the past year in large part due to a lack of male participation in nontraditional program opportunities, primarily due to the lower wage potential of many traditionally female occupations.

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 print and online materials promoting gender equity choices and highlighting successful students/alumni; sponsorship of gender equity clubs, such as Women in Technology; participation in Totally Trades; hosting outreach activities with state agencies, like New Ventures Maine; 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; and focusing recruitment efforts on nontraditional students enrolled at secondary CTEs.

In addition, as a result of the improvement plan implemented in the 2012-2013 academic year and continuing currently, the following strategies exist 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.

**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. MDOE 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. During fiscal year 2016-2017 the special populations education specialist attended the The National Summit for Education Equity hosted by National Alliance for Partners in Equity (NAPE) , the annual training for Methods of Administration (MOA) Coordinators hosted by the US Office of Civil Rights, Title IX training hosted by the National Woman's Law Center, the annual Tri-State CTE conference held in Vermont and weekly training sessions on ADA facility standards. During fiscal year 2016-2017 MOA visits were conducted and reports completed at 3 out of 27 Maine secondary CTE schools.

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.

Postsecondary: 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, 61.6% of CTE concentrators and 62.0% of CTE participants enrolled in the Fall of 2016 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 two support positions to provide Perkins technical assistance and a 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.

Secondary: 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, 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 3-4 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.

The Maine DOE provides technical assistance to eligible recipients in a variety of ways. Each consultant is assigned as liaison to three-four secondary CTE schools and 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.

The MDOE CTE Facilities Consultant conducts onsite technical assistance reviews as requested. This allows schools to comply with the Maine Department of Labor facility requirements.

Technical assistance is continuously provided to the local CTE schools on the use of the online grant management and reimbursement systems. Without this ongoing training the local schools would have an additional burden in trying to use the online systems.

The MDOE CTE consultants meet bi-monthly with the CTE Directors at the Maine Administrators' of Career and Technical Education meetings, to provide direction and guidance on any State initiatives and offer support as needed and/or requested.

Postsecondary: 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. The online grant management system is continuously 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:**

52474

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

150

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

2016 2017 the Perkins correctional funds were used to support the youth facility. was a transition year for Perkins correctional funds in Maine.

It is difficult to determine the total number of students served in CTE as the population fluctuates constantly.

This facility has a capacity of 163 residents. These students are allowed the opportunity to take CTE while incarcerated. Funds during the 16-17year were used to do the following:

A teacher participated in a training for small engine repair to explore the option of offering the small engine program at the facility.

Training manuals, books, equipment and supplies were purchased for the carpentry and culinary arts programs.

The Culinary Arts students continued the SOLO café which offers catering events both inside and outside the facility.

The Carpentry program continued to engage students in CTE education.

Certifications were offered in ServSafe and OSHA.

Concurrent secondary / postsecondary credit opportunities were offered through Southern Maine Community College. Students completed a Fabrication concurrent course and received an aggregate of 27 total contact hours. Students completed a Basics of Excel concurrent course and received an aggregate of 15 contact hours. Both courses resulted in transcript hours at Southern Maine Community College as well as high school credit applied towards high school graduation. Offering the postsecondary course options as been a much-needed program at the facility.

### **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.**

No funds used.

**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?**

No

# Consolidated Annual Report, Program Year 2016 - 2017

## 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?**

A state leadership supported position along with leadership funds for professional development were used to facilitate workshops to determine the natural intersections of academic ELA and math standards to CTE program curriculums. MDOE academic and CTE staff, secondary academic teachers, and secondary CTE teachers all attend.

Secondary: Over the past year, instructors from a number of Career and Technical Education (CTE) programs have worked with high school Mathematics and English Language Arts (ELA) teachers from around the state to find points of intersections where students can demonstrate application of content knowledge proficiency of the Maine College and Career Readiness standards to industry standards. The Maine College and Career Readiness Standards were previously known as the Maine Learning Results, with the Guiding Principles. CTE Programs of Study have always been proficiency-based as students gained knowledge and skill that lead directly into professional certifications and careers, post-secondary education or higher-level training. Demonstrating proficiency in CTE industry standards often involves both an academic approach to gathering information and sharing knowledge, as well as performance demonstration that reflects skill with various tools and applying a variety of technologies and “soft skills”.

In health occupations, for instance, indicators such as: “describe the key regulations governing the functioning of health care and human service providers” and an ELA target: “integrate and evaluate multiple sources of information presented in diverse formats and media in order to address a question or solve a problem” unpack real-world applications as they relate to career requisites. Not every high school student participates in CTE programs, but those who do often see the convergence and relevance of the learning in many of their academic classes demonstrated in their career pathway. In the past CTE students may have been able to earn elective credits toward graduation in some schools and districts. The proficiency-based diploma requirements potentially allows a broader demonstration of a student’s learning as applied to their work at CTE schools and centers and sending high schools throughout the state.

Another intersections work session is in the planning stage which will bring the total to 11 programs intersected by early 2017. The following programs have participated in the Intersections workshops thus far: Automotive, Carpentry, Computer Technology, Culinary Arts, Early Childhood Education, Health Occupations, Law Enforcement, and Welding. The next group of CTE and academic teachers will cover Auto Body, Electrical, and Precision Machining. Although the current intersections work has focused only on Math and ELA, the Guiding Principles, and Career and Education Development (CED) it is anticipated that the future intersections work will take place with the secondary Science standards since most CTE programs have STEM connections.

Postsecondary: 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: 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. MDOL SafetyWorks Safety Cohort trainings and policy development were held

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 an 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.

Collaboration between several CTE schools and MDOL allowed for the development of CTE program safety schemas and safety videos for all CTE schools to use. Interested schools also work with MDOL to work towards SHAPE schools. Funds are also utilized to provide industry related safety and OSHA training for CTE instructors.

Programs of Study Status 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. Currently, all schools are now required to have at least 20% of programs in Programs of Study. 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.

Postsecondary: Each of the colleges of the M CCS 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 8,158 CTE concentrators in 2015, 6,675 (81.8%) graduated and/or remained in higher education. 4,327 of those students retained were enrolled in the same institution from Fall 2015 to Fall 2016, with 787 transferring to another institution, either within the MCCC or not. Of the 1,550 non-transferring graduates, X were employed based on a data match conducted by the Maine Department of Labor. (still awaiting data – 10 graduates eliminated because of invalid SSNs)

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

Yes

Leadership funds support the position that provides evaluation of secondary CTE guidance and counseling opportunities provided to students.

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 counselors. Partner sending school guidance staff often meets as members of the CTE center/region advisory committee.

Work continued with the DOE on the legislatively mandated revised CTE Essential Programs and Service (EPS) funding formula. This new formula will be program cost based and is will most likely include allocation of funds for guidance and career development counsellors at the Maine secondary CTE schools. These increased resources will provided valuable academic and career guidance..

Postsecondary: The colleges within the MCCC 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 statewide articulations during the Perkins IV 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, and Program of Study Agreements.

Maine secondary CTE schools are now required to have articulated credit options for at least 50% of their approved programs. Many of our schools far exceed that. In addition, State-wide (Enhanced) Articulation agreements have been developed in four program areas: Culinary Arts (ACF), Electrical Technology, Precision Machining (NIMS), and Automotive Maintenance and Light Repair (NATEF). Students who complete the basic requirements outlined in these agreements are eligible to receive anywhere from 3-6 credits depending on which Maine community college they attend for completion of the articulated programs. During Perkins IV, Maine put into law that the Maine Community College System must review the secondary CTE program standards and certification to determine what postsecondary credit should be awarded. This process has proved more viable than the Perkins State Plan enhanced articulations.

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 system-wide enhanced articulation agreements. Each college has staff focused on articulation, making connections between college faculty and CTE programs. Programs of study are initiated at the secondary level, with postsecondary review by department chairs, academic deans, and college presidents. Enhanced articulation agreements exist at a state-wide level, drafted and maintained by the MDOE and MCCS. Work has begun on a more streamlined, student-friendly iteration of a state-wide agreement that ties third-party assessments taken by secondary CTE students directly to postsecondary credit. The hope is to remove barriers to the award of college credit, while providing consistent, reliable assurance that students have attained the associated skills.

**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?**

No

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

Yes

Perkins Leadership funds were used to support student activities in Leadership conferences of CTSOs, and local funds are used to offer support through stipends for faculty to be advisors for CTSO student activities.

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 leadership funds were used to grant each of those six organizations \$2,000 each to use for leadership activities. The CTE state consultants provide technical assistance, leadership training and judging at the state competitions.

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 for these purposes. 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

Leadership funds pay for a position that works with collaboration and partnerships which help to support CTE schools in their efforts to expose students to all aspects of industry through business and industry connections.

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 continued the development of mentorship programs 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 pay for positions that work with collaboration and partnerships which help to support CTE schools in their efforts to build relationships with business and industry.

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

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 an 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 boards, and WIB 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.

Secondary: Between July 1, 2016 and June 30, 2017 eight new programs have been developed and approved: Biddeford-Plumbing; Foster Tech-Exploratory; Hancock Count-Biotechnology, Biomedical, Marine Technology; Presque Isle-Cosmetology, Sanford-Law Enforcement, Tri-County-Natural Resources Pathways

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 and 20% of the related industry standards, 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. Currently five of Maine's secondary CTE schools have exploratory programs.

**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. The MCCS has a rigorous approval process for all new postsecondary programs that involves its Board of Directors and key MCCS personnel. This process is continually developing to include emerging labor market data available through resources such as Burning Glass and EMSI Analyst, as well as the Maine Department of Labor, to ensure applicability of programs to current labor market needs. 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 funds are used at both the secondary and postsecondary levels to promote this work. The new CTE certification law continues to move towards making Maine teacher certification accommodating for trades professionals to become CTE teachers.

**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:

\*The candidate will have met the requirements for being eligible for a conditional certificate as outlined in Chapter 115. \* The candidate must be hired by a school district and the Certification Office must receive an

affidavit of employment before the actual certificate is issued. Once issued, it will be valid for that school

year and expire the following July 1st.

Applicants shall meet eligibility requirements specified in Part I. In addition, eligibility for this endorsement shall be established by one of five pathways. Individuals who are not eligible through any of these pathways may be eligible for a conditional certificate, in accordance with Section 3.1.B.7, below, and Part I Section 5.4 of this rule.

Maine has now legislated multiple pathways for secondary career and technical education teachers to receive Maine teaching certification. A brief description follows :

1. Requirements for all Pathways: (Note – some CTE endorsements may additional program specific requirements.)

hold a valid Maine certificate or license in the craft or trade to be taught; and

hold an industry recognized credential or passed an industry-related assessment in the endorsement area for which a license or credential is not available; and

worked for one year or taught for five years preceding the initial application in the endorsement area; and

completed an approved course for "Teaching Exceptional Students in the Regular Classroom"; and

met the cut score on the Basic Skills Test in reading, writing, and mathematics or completed, with a passing grade, two college level courses in mathematics and English language arts; and

provided demonstration of pedagogical knowledge and skills

completed an approved "CTE orientation" program or have five years of actual teaching or counseling in public secondary or post- secondary CTE school.

Satisfied one of the following five routes by documenting that one of the following combinations of learning, paid applied employment, or teaching in the endorsement area has been completed.

2. Endorsement Eligibility Pathway 1

Earned a bachelor's degree from an accredited institution, with a minimum of 24 semester hours specifically applicable to the endorsement area; and

Employed for a minimum of 24 months (4,000 hours) in practice or teaching the endorsement area.

3. Endorsement Eligibility Pathway 2

Completed a registered apprenticeship; and

Employed for a minimum of 36 months (6,000 hours) in practice or teaching in the endorsement area.

4. Endorsement Eligibility Pathway 3

Earned a two-year degree or certificate in the endorsement area from an accredited technical institution ; and

Employed for a minimum of 36 months (6,000 hours) in practice or teaching in the endorsement area.

5. Endorsement Eligibility Pathway 4

Earned a high school diploma or GED;

Completed a minimum of 24 semester hours directly related to the endorsement area from an accredited college or university, and

Employed a minimum of 48 months (8,000 hours) in practice or teaching in the endorsement area.

6. Endorsement Eligibility Pathway 5

Earned a high school diploma or GED;

Completed a minimum of 36 months (6,000 hours) of paid experience learning the trade or craft; and

Employed a minimum of an additional 36 months (6,000 hours) in practice or teaching in the endorsement area.

Postsecondary: 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