CTE Glossary of Terms

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For CTE Directors, Instructors, Staff, and Students

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Maine Department of Education

Career & Technical Education

Glossary of Terms

General Terminology

Apprenticeship
Apprenticeship is an employer-sponsored training that allows students with a high school diploma or GED to work in their field of interest, getting on-the-job, hands-on experience while earning a salary. MDOL Website as of November 2015:
http://www.mainecareercenter.com/services-programs/training/apprenticeship/students/index.shtml

Articulation
Articulation is an agreement between a high school Career and Technical Education (CTE) program/school and a post-secondary institution, usually a community college, offering a similar program. An Articulation agreement specifies the program instructor qualifications and outlines alignment of the CTE course curriculum, instructional materials, tools, credits, contact hours, industry standards, certification, assessment, and minimum grade. Students completing articulation requirements in their high school programs earn college credits in their CTE Program of Study and may qualify for an industry related credential.

Assessment
The process of gathering, describing, or quantifying information about knowledge and performance. More under appendix A

Assessment System
The combination of multiple assessments into a comprehensive reporting format that produces comprehensive, credible, dependable information upon which important decisions can be made about students, schools, districts, or states. An assessment system may consist of a norm-referenced or criterion-referenced assessment, an alternative assessment system, and classroom assessments. More under appendix A

Career and Technical Education (CTE)
Educational system that offers a sequence of courses providing technical and occupational knowledge and skills intersected with relevant academic standards that focuses on career readiness, and knowledge of all aspects of an industry. Career and technical education includes proficiency-based applied learning that provides opportunities to gain technical skill competency, an industry-recognized credential, a certificate, or an associate degree.

> Maine Chapter 313 states: "Career and technical education" means a course or program of education designed to create or improve job-related skills that is part of a secondary school curriculum and approved by the commissioner according to this chapter. A school administrative unit shall make career and technical education available to persons residing in the school administrative unit who are eligible to receive free public secondary education.

CTE Center
Maine Chapter 313 states: "Center" means an administrative entity established pursuant to this Chapter that provides career and technical education to secondary students. Unless otherwise specifically provided for by this chapter, a center is governed, operated and administered by a single school administrative unit. A center shall make its programs available to serve secondary students from school administrative units with which it is affiliated. A center may include within its administrative structure career and technical education satellite programs operated by school administrative units with which it is affiliated.

CTE Programs of Study
A planned sequence of courses that integrates rigorous academic knowledge with technical skills and knowledge to provide secondary CTE students with a bridge to postsecondary education and career pathways. Programs of Study lead to an industry recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree. Programs of Study are developed in partnership with secondary schools, post-secondary institutions, employers, industry groups and other stakeholders. An intended outcome of a Program of Study is the enhanced collaboration between the various stakeholders. Maine's CTE model organizes Programs of Study within 10 broad Career Clusters designed to provide students with multiple career pathways leading to a variety of potential careers and postsecondary education. A Program of Study may include articulation that extends dual credit or concurrent enrollment, but it is not required. At the secondary level, academic rigor is ensured through connections to the revised Maine *Learning Results: Parameters of Essential Instruction* (MLRs).

CTE Region
A quasi-municipal corporation established by the Legislature to provide CTE to secondary students and that is comprised of all the school administrative units within the geographical boundaries set forth for each CTE region in Chapter 313 section 8451. A region is governed by a cooperative board formed and operating in accordance with Maine law.

Career Pathway
A coherent, planned sequence of career technical education courses detailing the knowledge and technical skills students need to succeed in a specific career area.

Career Technical Student Organization (CTSO)
A professional student organization for individuals enrolled in a CTE program. CTSOs develop leadership skills, provide competitive career development activities, enhance academic skills, promote career choices, contribute to employability, and provide access to other opportunities such as scholarships and travel.

Carl D. Perkins grant funds?
The Carl D. Perkins grant is the federal funding that supports CTE. Along with Maine's acceptance of these funds come a number of federal requirements (such as having programs of study, adhering to rules on time and effort, etc.). CTE schools must complete grant applications each year to access this funding. For more information, see federal laws.

Carl D. Perkins Vocational and Technical Education Act
A federal act to improve career technical education programs; integrate academic and career technical instruction; serve special populations, including promoting gender equity; and to prepare CTE students for high skill, high wage, high demand occupations in current or emerging professions.

Center Advisory Committee (see also Program Advisory Committee)
A "Center Advisory Committee" (CAC) is responsible for advising the CTE director concerning the provision of career and technical education by the center. The CAC is to meet six times per year. Membership shall include the following: the superintendent of each unit governing or affiliated with the center or the superintendent's designee; a member of the school board for each unit governing or affiliated with the center, chosen by the school board; and if approved by the school board of each unit governing or affiliated with the center, representatives, on either a voting or nonvoting basis, of private secondary schools approved for tuition purposes and served by the center.

Classification of Instructional Programs (CIP) Code
CIP stands for Classification of Instructional Programs. These codes were created and last updated in 2010 by the U.S. Department of Education's National Center for Education Statistics (NCES) to categorize different educational fields. CIP codes are used to identify the overall content covered under different CTE programs.

Common Calendar
According to law under Section 2-A of Chapter 209, "School Days, Holidays, Special Observances, each CTE center/region and all the schools is serves are to adhere to a regional school calendar. On this regional school calendar, no more than five instructional days may be dissimilar among the CTE center/region and its sending schools.

Comprehensive School Review (CSR)
Federal legislation under Carl D. Perkins requires the Maine DOE to evaluate CTE programs and schools. Individual CTE centers/regions determine whether this evaluation is to be accomplished through consultation with the New England Association of Schools and Colleges (NEASC) or by a team made up of the Maine DOE CTE team as well as Maine CTE teachers and administrators. The Maine DOE CTE school review is conducted at no direct cost to the school. In either case, the comprehensive review follows a self-study completed by the CTE school.

Concurrent/Dual Enrollment
Concurrent Enrollment courses are taught at a high school or career and technical education school. Concurrent Enrollment classes are actual college courses that mirror the same classes taught on college campus. The classes are taught by secondary school instructors who have been approved by the college faculty. The courses are taught during the normal school day. Students are registered, assessed, and receive grades on a college transcript in the same manner as students in the same classes on campus. Selection of instructors and subsequent evaluations, course content, and assessment procedures are the purview and responsibility of the community college or postsecondary institution providing the concurrent or dual enrolled course.

Cooperative Education (Co-op)
Secondary CTE programs that include both classroom instruction related to workplace skills and paid "live-work" training in the community that complements this instruction.

Differentiated Instruction
Instruction matched to individual students' needs, readiness, interests, circumstances, and learning profiles.

Dual Enrollment
Dual enrollment courses are college courses that are taught by an adjunct or full-time professor at college locations, online or in a high school setting. Courses can be used for both high school and college credit. Students must meet dual enrollment guidelines to enroll for dual enrollment. Some dual enrollment courses may be offered at a high school. Selection of instructors and subsequent evaluations, course content, and assessment procedures are the purview and responsibility of the community college or postsecondary institution providing the concurrent or dual enrolled course

Industry-Recognized Credential
Is sought or accepted by employers within the industry or sector involved as a recognized, preferred, or required credential for recruitment, screening, hiring, retention or advancement purposes; and, where appropriate, is endorsed by a nationally recognized trade association or organization representing a significant part of the industry or sector.

Live or Outside Work

> As defined in Chapter 237: An actual work situation as opposed to a practice piece. Practice pieces are normally torn down after construction or service. (Example: the building of a structure for use by a person or agency or the repair of an automobile or electrical appliance for use by a consumer is a live work project.)

Live or Outside Work is intended to enhance the educational offerings of the CTE school/region by allowing students to master competencies. Live or Outside Work is not intended to result in unfair competition with the private sector.

Career Clusters

> From the Federal Career Cluster website (www.careertech.org): The National Career Clusters ® Framework provides a vital structure for organizing and delivering quality CTE programs through learning and comprehensive programs of study. In total, there are 16 Career Clusters…representing more than 79 Career Pathways…

The Maine Career Clusters Framework is comprised of 10 Career Clusters and related Career Pathways to help students explore different career options and better prepare for college and career. The Career Clusters and related Career Pathways serve as an organizing tool for schools, small learning communities, academies and magnet schools to develop more effective programs of study and curriculum. The 10 Career Clusters in Maine are:

- Agriculture & Natural Resources
- Architecture, Construction & Manufacturing
- Arts, Audio/Video Technology & Communications
- Business, Management, & Administration, Finance, Marketing, Sales & Service
- Education & Public Service
- Health & Human Services
- Hospitality & Tourism
- Public Safety & Security
- Science, Technology, Engineering, Mathematics (STEM) & Information Technology
- Transportation

Job Shadowing
Spending time visiting or "shadowing" someone who is doing a career in which a student is interested.

Memorandum of Understanding (MOU)
Enacted by the 125th Maine Legislature, 20-A M.R.S. § 12709(11-A) requires the Maine Department of Education (MDOE) and the Maine Community College System (MCCS) to enter into a memorandum of understanding (MOU) that establishes a process by which the MCCS will review programs of the career and technical education centers and career and technical education regions that are using national industry or state certification standards to determine the nature and amount of college credit that must be awarded upon successful completion of an approved secondary school program. Credit must be awarded whether or not the student has matriculated in the college awarding the credit. Receipt of this credit does not entitle the student acceptance into the college awarding the credit. The MOU was finalized on May 27, 2014.

Apart from the credit described above, CTE students may access college credit through participation in concurrent or dual enrollment courses offered by the colleges of the MCCS. These courses must comply with the Standards published by the New England Association of Schools and Colleges, Inc. Selection of instructors and subsequent evaluations, course content, and assessment procedures are the purview and responsibility of the community college providing the concurrent or dual enrolled course.

Finally, CTE students may access college credit through articulation agreements between an individual college of the MCCS and a secondary CTE Center or Region. These agreements are the responsibility of the participating MCCS colleges and the secondary CTE Center or Region, and will be maintained at a local level. This Memorandum of Understanding will not replace existing articulation agreements between MCCS colleges and secondary CTE Centers or Regions.

Mentorship in CTE
A mentorship program is structured around a CTE experience as opposed to the employer's actual operations, for students and businesses where pre-apprenticeship programs are not a viable option. It is viewed as an extension of the individual's CTE educational experience and provides skills that can be used in multiple employment settings, as opposed to skills particular to one employer's operation. The mentorship experience is for the benefit of the mentee and does not displace regular employees, but works under close supervision of existing staff. The program will be open to CTE students providing training to students with written job plans that will include CTE Industry Related standards, start and end dates, and number of hours the student is expected to be on site, an evaluation assessment, and a signed agreement between related stakeholders. The student will receive credit through their respective CTE center/region, a completed Student Work Portfolio and certificate of completion from the Department of Education (upon successful completion).

Program Advisory Committee
A "Program Advisory Committee" (PAC) is a group that meets at least once a year to review the status of a CTE program, verifying that its curriculum, instruction, assessment and equipment are all up-to-date and representative of industry practices and needs. Members of each PAC may include the program teacher, past students, industry representatives, community members and other stakeholders.

Pre-Apprenticeship
Pre-Apprenticeship is one to two years of customized high school academics coupled with up to 1,000 hours of on-the-job learning during the 11th and/or 12th grades. Upon graduating, Pre-Apprentices may enter full-time employment as Registered Apprentices. Many apprentices matriculate into the Trades and Technical Occupations Degree Program (TTO degree). (MDOL web site as of November 2015: http://www.maine.gov/labor/careerctr/services-programs/training/apprenticeship/pre-apprenticeship/index.shtml

Secondary CTE Program
An approved sequence of rigorous career technical courses at the secondary level which prepare students for entry-level careers. Each sequence is comprised of a minimum 350 hours for a 1 year program and 700 hours for a 2 year program and delivering the selected industry standard for the program area. Programs and standards are approved by the Commissioner of Education during the program application approval process. CTE programs also prepare students by providing the foundations for more advanced postsecondary training, as well as assisting students to complete relevant state academic standards.

Occupational Technical Skills
The learned ability to carry out or perform specialized procedures and methods used in any specific occupation. For example, how to take blood pressure or how to bake a cheesecake.

Work-based Learning
CTE program learning experiences that are outside the classroom or shop and include an employer or community connection. Examples include pre-apprenticeship, job shadowing, mentorship, clinical experience, field experience, or other learning experience fundamentally external to the classroom or shop.

CTE Standards-Related Terminology

Career Readiness Standards (Content)
Also known as workplace readiness standards cover generic skills and qualities, "soft skills", which students and workers must have in order to learn and adapt to the demands of any job. These standards are partially addressed in the Maine Learning Results: Guiding Principles, and the Career and Education Development content area.

Maine Learning Results: Parameters for Essential Instruction
The Maine *Learning Results: Parameters for Essential Instruction* are the state approved academic standards for essential teaching and learning in grades Pre-Kindergarten through Diploma across eight content areas which support the goals outlined in the Guiding Principles. The eight content areas include: Career & Education Development, English Language Arts, Health Education & Physical Education, Mathematics, Science and Technology, Social Studies, Visual & Performing Arts, and World Languages.

> The Career & Education Development content area of the M*LR: PEI* should not be confused with Career & Technical Education (CTE).

Standard
A standard is one or more statements or phrases that clearly define the knowledge and skills to be taught and/or the level of performance that is expected in a content or career area. Standards can be categorized as content standards and performance standards.

Pathway Standard, Technical Standards, or Occupation-Specific Standards (Content)
A statement of knowledge or skills deemed to be essential for all students in a given career pathway. These standards pertain to skills of a particular job or occupation, such as that of a medical assistant or a lab technician. Career field technical content standards define the knowledge and skills students need in order to be successful in a given career field, and are established by industry.

Performance Standards (Performance)
These standards differ from content standards in that a performance standard indicates how well we expect students to perform. Performance standards define and illustrate levels of expected accomplishment with respect to one or more content standards. They are explicit definitions of what students must do to demonstrate proficiency at a specific level on the content standards.

Standards Based Education
Standards-based education is the practice in which students must attain proficiency toward defined outcomes in a given area before progressing to a further level of instruction. This practice contrasts with that of having students advance each year to a higher grade level in school independent of what they have learned. CTE has traditionally practiced a type of standards-based education since students often do not move onto more advanced skills until they demonstrate mastery of the initial required skills which they are taught.

Technical (Tech) Update Group
A Technical Update group is the set of CTE instructors engaged in teaching a similar CTE program area. This group is normally chaired by a CTE director and meets in person or by televised conferencing at least once or twice each year. The purpose of these meetings is to help all instructors stay current with the requirements of the industry and to work together to constantly revise and improve the instruction provided to CTE students in the given program area.

Appendix A

CTE-Assessment Terminology

Types of Assessment, Credentials and Certificates:

Industry-Recognized Assessment – an assessment that is widely accepted by industry; Example: PrintEd (graphic arts)

Industry-Recognized Credential – the result of completing the stated requirements (e.g. time, skill, test) of the industry recognized entity that results in the awarding of a credential; Example: Automotive Service Excellence (ASE) certificate

Industry-Recognized Certificate – the result of completing the stated requirements (e.g. time, skill, test) of the industry recognized entity that results in the awarding of a certificate that is widely accepted by industry; Example: NCCR; 570

Industry-Related Assessment – an assessment that was developed in collaboration with industry/subject matter experts; Examples: NOCTI, SkillsUSA Workforce Ready; CTECS

Industry-Related Certificate –the result of completing the stated requirements (e.g. time, skill, test) of the state recognized entity that results in the awarding of a general non-technical certificate of achievement; Example: NOCTI Workplace Readiness; CTECS Workplace Readiness Skills; SkillsUSA Workforce Ready Employability

State Certificate – the result of completing the stated requirements (e.g. time, skill, test) of the state recognized entity that results in the awarding of a State of Maine-issued certificate of achievement. Examples: State of Maine Ambulance Vehicle Operators performance assessment; CNA, Certified Nurse Assistant.

State License – meeting the stated requirements (e.g. time, skill, test) of the state recognized entity that results in a State of Maine-issued license to practice in a field. Example: State of Maine Inspection Technician.

General Assessment Terminology

Formative Assessment
Helps monitor the progress of learning and the acquisition of learning outcomes during instruction; its purpose is to provide continuous feedback to both students and teachers on learning successes and failures.

Performance Assessment
A performance assessment requires students to actively accomplish complex and significant tasks, while bringing to bear prior knowledge, recent learning, and relevant skills to solve realistic or authentic problems.

Performance Task
An authentic assessment modeled after a real-life task or situation that provides a student an opportunity to demonstrate his or her abilities and apply knowledge and skills.

Portfolio
A collection of work, usually drawn from students' classroom work. The contents of a portfolio, i.e., the collection as a whole, can be assessed; however, the real importance of portfolios is that they provide an opportunity for students to analyze, summarize, and reflect on their own learning.

Rubric
An assessment tool that provides scoring guidelines and descriptions of categories or levels of performance.

Summative Assessment
An assessment at end of student work to audit learning.