

Career Development Education

Activities Guide and Glossary, Version 1.0

Introduction

There is an emerging consensus across the country and the Commonwealth — among students, parents, communities, educators, business leaders and elected officials - that academic proficiency alone is no longer enough to prepare students for success in the 21st century economy. In response, the state has launched a body of work that is designed to ensure that *all* students become *both* college *and* career ready by the time they complete high school.

Recently, the Board of Higher Education (BHE) and the Board of Elementary and Secondary Education (BESE) voted to adopt a common definition of “college and career readiness” (see Appendix A). This common definition will support a more seamless transition for students from elementary through the secondary level and on to post-secondary education, with educators at each stage sharing an aligned vision of what the end goals are for all students.

These end goals are based on students acquiring knowledge, skills and experiences in three domains: Learning (academic), Workforce Readiness, and Qualities and Strategies (personal/social) with the ultimate goal in each domain being competency attainment. With respect to the workforce readiness domain in particular, it is no longer enough merely to expose students to career information. They also need to *explore* career options, and then *experience* them through some form of work-based learning. They need an opportunity to process and reflect on these experiences with adult feedback and support. Accountability for students’ competency attainment must become an expectation of influential adults responsible for organizing and delivering career development activities whether in traditional school settings or in the community.

This Guide/Glossary finds its roots in the rich history of Career/Vocational Technical Education (CVTE) in Massachusetts. CVTE programs are offered in local and regional school districts across the Commonwealth, with approximately one in five students enrolled in a CVTE program of study.

In addition, School to Career Connecting Activities also supports career development education in Massachusetts, particularly in our academic and comprehensive high schools.

The history of these initiatives laid the groundwork for the Massachusetts Board of Elementary and Secondary Education’s Task Force on Integrating College and Career Readiness. In the [Report](#) “*From Cradle to Career: Educating our Students for Lifelong Success*,” the Task Force calls for, among other things, the creation of a toolkit and menu of opportunities for educators, employers and practitioners to help guide career development education (see Appendix B for a summary of the report recommendations).

In addition, the CDE benchmarks (see Appendix C) developed by ESE in partnership with the Massachusetts School Counselors Association and the Center for School Counseling Outcome Research, University of Massachusetts Amherst, provide practitioners support in constructing, evaluating, and maintaining CDE efforts and programs. The Massachusetts benchmarks are offered as guidelines for establishing career development programs that purposely link career development education to learner outcomes that will contribute to future success and employability.

The Purpose of this Guide/Glossary

This Guide/Glossary provides a variety of CDE activities now offered by many schools and communities in Massachusetts, along with definitions and frameworks to assist with efforts to create or expand and improve these activities. It has been developed by ESE with the input and assistance of experts from the worlds of education and workforce development committed to advancing the work of career development education across the Commonwealth.

This Guide/Glossary endeavors to:

- Promote the use of common language across the state about the activities that constitute Career Development Education
- Assist staff in schools, as well as programs outside of the school setting, that may be new to CDE to gain a better understanding of these activities, and implement them with quality and fidelity
- Describe three general stages of CDE (awareness, exploration and immersion) and present examples of the types of CDE activities associated with each stage so that schools and programs can work to develop a sequential progression of CDE
- Ensure quality activities by articulating basic standards for these CDE activities

This document will be updated and enhanced as practitioners put it to use. It will be accessible on the web, with a link to be found at the Connecting Activities home page on ESE's website at <http://www.doe.mass.edu/connect>. ESE intends to offer related tools and information with this Guide once it is online, including a compendium of helpful websites that relate to the many topics referenced.

ESE invites policy-setters, practitioners and others to contribute to the dialogue about CDE by using the Contextual Learning Portal found at <http://resources21.org/cl>. This web-based resource was created as a space for school, community-based organizations and others to support contextual teaching and learning for students and teachers. It is an optimal setting for storing quality CDE projects and curricula.

Career Development Education

Career Development Education offers students a framework for gaining the knowledge, skills, and experiences necessary to navigate the myriad of options available for post-secondary success. In an exemplary CDE model, students will participate in a well-designed sequence of CDE activities that become progressively deeper and more intensive as the students gain skills and maturity. CDE also addresses student attitudes and beliefs about their future selves, ensuring a personalized approach to their learning process.

An exemplary model enables students not only to participate in a series of CDE experiences over several years, but links those experiences to an individual college and career planning process. This is accomplished through the use of adult-guided reflection that ensures students process the CDE experiences they have had. CDE experiences are documented in a portfolio, whether electronic or paper, allowing assessment of competency attainment.

A systematic approach to these experiences greatly enhances their impact and ensures that students will make better and more informed decisions about college and career choices. Research shows that quality CDE also enhances academic performance.

Three Stages of Career Development Education

Career Development Education encompasses three stages that help students move from the cognitive to the experiential:

- **Career Awareness**
- **Career Exploration**
- **Career Immersion**

Career Awareness: Career development begins with career awareness. Through career awareness experiences, children, teens and adults learn about the types of businesses and organizations that exist in the local, regional and national economy, about the occupations of the people who work in those businesses and organizations, about the educational steps needed to prepare for desired careers, and about the ways that people shape their career paths. They learn about trends in the labor market and jobs that are in demand in a range of occupations and industries.

Career awareness experiences begin in elementary school and continue through high school. They happen in the classroom, on field trips, after school, or in summer enrichment programs. They may be hands-on experiences or they may consist of reading or writing activities. Students begin to formulate career aspirations during the awareness phase.

As students progress in their learning and/or maturity, a deeper approach to career awareness should begin. Students should start to have more deliberate, structured college and career

awareness experiences in middle school which continue through high school. Many high schools in Massachusetts offer students a range of career awareness opportunities, such as:

- Taking career interest inventories/assessments
- Exploring job market information through websites and publications
- Listening to career speakers
- Participating in a career day or career fair

Career Exploration: As students begin to identify their interests, they can learn more about specific career options through career exploration activities. Many schools and programs offer:

- Career exploration workshops or classes
- Opportunities for students to do “job shadows” in areas of interest
- Opportunities for informational interviews with local professionals
- Career-related research projects
- A variety of other classroom and community projects that support career exploration

In quality CDE, career exploration is complemented by a process of reflection, supported by influential adults such as guidance counselors, advisors, classroom teachers, workplace supervisors, parents, etc. Many schools use a formal college and career planning process (also referred to as a college and career plan, an education and career plan or an individual learning plan), using print-based or electronic systems for students to track their experiences, define next steps and continually reflect on and refine their short-term and long-term goals.

Career Immersion: Through career immersion experiences, students participate directly in career-related activities. Career immersion experiences include:

- In-depth work in a career-related class
- Career-related clubs and after-school activities
- Internships or cooperative education placements
- Capstone projects focused on areas of interest
- Entrepreneurial projects
- School-based businesses
- School-based volunteer work
- Community-based volunteer work
- After-school and summer jobs
- Any other experience in which students are learning through active participation in a career-related role

These hands-on immersion experiences are complemented by formal instruction, including classes, workshops, or one-on-one coaching. Again, reflection is a key component, with students having opportunities to reflect on what they are learning to evaluate the skills they are gaining and

to continually re-visit, refine and reflect on short-term and long-term goals. Quality immersion experiences in Massachusetts incorporate assessment of skill gain, most commonly with the MA Work-based Learning Plan.

CDE Models and Approaches

This Guide has outlined the three stages of CDE, i.e., career awareness, exploration and immersion, and generally recommends a progressive sequence of knowledge and experiences for students to help them move through these stages. It does not dictate a precise mix. School districts and programs implement quality CDE in a wide variety of ways, and offer students a range of approaches to personal college and career goal setting. In some cases students are invited to map out specific education and career goals; in others, students will elect broad goals and plan to build a more general foundation for postsecondary education and training.

Different kinds of school and training environments offer different experiences. For example, students in career/vocational technical high schools experience in-depth career immersion early on, with freshman year exploratory programs leading to the selection of a program of study focused on their career area of choice. Academic and comprehensive high schools have great latitude about ways to approach CDE. Some place a strong emphasis on awareness and exploratory programs. Others have taken a more intensive approach to career immersion and have restructured the entire high school experience around career academies/pathways with industry sector themes. Adult education programs may respond to the fact that many of their students already have workplace experiences and bring these experiences to bear on their education and career planning.

ESE supports the entire range of high quality CDE approaches available in schools and communities across the Commonwealth and encourages all to continually improve their efforts. ESE has set ambitious new goals with respect to scaling up the extent to which CDE is offered to students, with the ultimate goal of these experiences being offered to all students. This Guide is designed in part to support quality career development experiences and to benchmark progress toward attainment of the Department's goals.

The Glossary

The following glossary offers definitions and guidance about a wide range of CDE activities. It incorporates practices, activities and sources used in general K-12 education, Career/Vocational Technical Education, Adult and Community Learning Services, and Special Education Services, among others. It does not purport to be an exhaustive list of all CDE experiences, but instead a practical list that identifies those which are most common across the state. Experienced practitioners will be familiar with these definitions; newcomers will benefit from the guidance they offer.

This glossary is aligned with and supports the work of CVTE and Connecting Activities as well as other major statewide initiatives driving career development education in the Commonwealth. The network of CVTE programs not only provides high quality education to enrolled students but also provides tools, resources and educational approaches that are valuable for all students. CVTE provides model approaches to college and career planning, applied curriculum design, vocational technical frameworks, resources for ensuring student health and safety in the workplace as well as many other resources identified in this glossary.

For more information about CVTE in Massachusetts, visit <http://www.doe.mass.edu/cte>.

The Connecting Activities initiative, which funds staffing and other supports across the state via the workforce development system working in partnership with schools/districts and community-based organizations, creates a state-wide infrastructure for the implementation of many of these activities, especially in our academic and comprehensive high schools.

See <http://www.doe.mass.edu/connect> for more information about Connecting Activities.

Connecting Activities maintains a database for tracking and managing information about career development and work-based learning experiences. The database includes an online version of the Work-Based Learning Plan as well as screens for tracking information about career awareness, exploration and immersion activities. The database will continue to serve as a source of data as ESE works to help schools and districts scale up this work.

School and youth program staff are invited to learn more about the database at <http://skillspages.com/masswbl>.

We hope that this glossary offers a useful tool to the field, from policy makers to practitioners, while we work together to increase access to CDE for all of our students.

Glossary

Category and Type of Activity	Activity Definition and Examples	Key Characteristics Duration/Time and Other Features
Career Awareness		
Career Day / Career Fair	<p>Career Days/Career Fairs involve the participation of representatives from numerous local and regional businesses and organizations who present information to students. Schools may host these, or students may participate in a regional Career Day/Career Fair. Major statewide and regional events include Construction Careers Day and other events.</p>	<p>Typically, this is a half-day or all-day event plus preparation and follow-up. Students prepare for a career fair by identifying areas of interest and questions they want to ask. Students follow up by writing about areas of interest and recording notes in their college and career plans or other location.</p>
Career Interest Inventory / Career Interest Assessments	<p>Formal and/or informal checklists and assessments designed to help students to identify possible career interest areas.</p> <p>Examples: Career interest inventories and assessments are available on line through: MassCIS https://masscis.intocareers.org <i>YourPlanfortheFuture</i> http://yourplanforthefuture.org My Next Move http://www.mynextmove.org College Board http://collegeboard.org and other websites. Many free and fee-based assessments are available in both print and online formats.</p>	<p>Typically this activity takes one or two classes or workshop sessions. Students need exposure to the vocabulary associated with career clusters, time to take the survey(s) and time to review and reflect on the results, with adult feedback and support. This activity allows for multiple extension activities such as: review of labor market information; career research projects; or additional surveys about skills and values.</p>
Career Speakers	<p>A presentation or series of presentations by local professionals about careers. Speakers typically talk about their own experiences and about education and skills needed for entry into their career field.</p>	<p>No minimum length is indicated; often these presentations occur during a single class. Features include opportunities for students to prepare questions ahead of time and opportunities for students to follow up though class discussion, written reflection, online research or other follow-up.</p>

Category and Type of Activity	Activity Definition and Examples	Key Characteristics Duration/Time and Other Features
College and Career Plans	<p>A formal planning tool for setting short and long term goals for postsecondary education and careers with features for planning and tracking classes, career development education activities and other experiences that will support these goals.</p> <p>Examples include several online options: <i>Your Plan for the Future</i> http://yourplanforthefuture.org Naviance http://www.naviance.com Career Cruising http://careercruising.com and others, as well as print formats.</p> <p>The Career Vocational Technical Education (CVTE) unit at ESE has provided a model college and career plan that prints onto a manila folder.</p> <p>A college and career plan may also include similar documents for out-of-school youth, wherever there is a long-term individualized plan.</p> <p>For students with disabilities, the MA Transition Planning Form (TPF) and Individual Education Plan (IEP) are additional tools that document an individualized path toward postsecondary education and careers. The TPF and IEP support – and are used in conjunction with – other futures-planning tools.</p> <p>Education and Career Plans (ECPs) used in Adult Education programs provide students and staff with a valuable tool to track student goals and progress toward college and career readiness. Appreciative Advising Revolution, which includes a training, a book, and a website, http://www.appreciativeadvising.net/ offers ways to help students with goal-setting, persistence, and college and career readiness strategies.</p>	<p>Ideally these planning processes are managed over multiple years (e.g. grades 9-12 or 7-12). They may be shorter-term if students begin the process later in high school.</p> <p>During the AWARENESS phase, the plans are introduced and preliminary information is recorded [projected 4 year plan, goals, career interest survey results]. Note that this activity is appropriately continued throughout all three phases of career development, from AWARENESS to EXPLORATION to IMMERSION.</p>

Category and Type of Activity	Activity Definition and Examples	Key Characteristics Duration/Time and Other Features
Company Tours / Career-Related Field Trips	<p>Visits and tours at a workplace where students observe workplace activities and listen to presentations by professional about their work and careers. Other career-related field trips may include trips to museums, science centers, conferences or other educational settings to see or experience career-related technology or projects.</p> <p>Examples: Tour of a bio-tech company, manufacturing facility, hospital lab; hands-on experience in a college science lab; and engineering days at a science museum</p>	<p>These generally are a half or whole day experience. To constitute an AWARENESS activity, they must have a career theme, provide an authentic career experience, and/or take place in an authentic work setting.</p> <p>Students prepare by learning about the company and the industry associated with it and developing questions. Follow up includes a reflection activity. Extension activities could include writing thank you letters, doing research about something they observed or reviewing labor market information.</p>
Analysis of Labor Market Information	<p>Viewing and studying Labor Market Information (LMI) through print and online sources. Information may include projected job growth, wages and salaries, job requirements and educational requirements for specific occupations. Information may also include overall trends in key industries and in local, regional, national job markets.</p> <p>Students may use a career interest inventory or assessment to identify career areas of interest and then use print and online labor market information sources to learn more about occupations in these career areas. Students may also use labor market information to learn about overall labor market trends, such as analyzing lists of fastest-growing occupations, analyzing wage and salary information across occupations or other economic analysis.</p> <p>For practitioners in the Adult Education system, SABES www.sabes.org offers Labor Market Information workshops throughout the year.</p> <p>The Occupational Outlook Handbook (on the O*NET website http://www.onetonline.org/) is a useful tool for helping students learn about careers, skill requirements, and salaries for various occupations.</p> <p>One-Stop Career Centers across the Commonwealth provide ongoing trainings on Labor Market Information.</p>	<p>LMI analysis typically takes place during a single class or workshop session. Ideally it is combined with a career interest inventory or assessment. Review of labor market information can be integrated into a math lesson, with students completing graphs to demonstrate understanding of trends.</p>

Category and Type of Activity	Activity Definition and Examples	Key Characteristics Duration/Time and Other Features
Middle School Events: Career Awareness and planning/high school choices	Workshops, high school visits and other events focused on the value of exploring career choices early, to help students and their families make decisions about the kind of high school to attend, and the connection between high school choices and postsecondary plans	Career awareness at the middle school level is often a program designed by a district's counseling department as part of students' transition from middle to high school. Ideally, MassCore and local graduation requirements are reviewed and students /families map out a preliminary 4 year plan and a 9th grade schedule.
Family Events: Career Awareness for Students and Families	Workshops and events offered students and families, often to inform them about the relationship between completion of a rigorous course of study, pursuit of postsecondary education and access to careers that offer good prospects for successful futures	Often occurring on a single evening, family-focused events can also be a program that extends over a series of several meetings/workshops.
Career Exploration		
Career Education Courses	Courses on general career development topics, including exploring career options, job search skills and career strategies	Courses can be a semester or year-long class, and are treated like other courses, with a syllabus, required assignments and a final grade.
Individual Coaching / Guidance	One-on-one sessions with a counselor or graduation coach that focus on career development education and personal planning about completing high school and creating post-secondary plans	There is a range of methods for individual coaching. Documentation of counseling activities via a career plan or career portfolio is highly recommended.
Workshops	Workshops, special presentations and classes covering a range of topics, such as: Financial/Economic Literacy, Resume writing, Interviewing, Job Search and Career Management Skills, and Work Readiness Skills (Specific topics are outlined below).	A variety of formats are common, including Guidance Workshops provided by guidance staff throughout each of four years of high school; workshops provided by Connecting Activities, One-Stop Career Centers, YouthWorks, Workforce Investment Boards or other programs; and workshop series provided using the "Empower Your Future" curricula offered by Commonwealth Corporation. Workshops and classes require students to complete products or participate in activities in order to practice skills and reinforce learning. Activities are ideally evaluated via a rubric and students are given the feedback necessary to improve the quality of their products/activities.

Category and Type of Activity	Activity Definition and Examples	Key Characteristics Duration/Time and Other Features
Workshop/ Training Topics: Financial / Economic Literacy	<p>Workshops, classes or special events about financial management, loans (including college loans, mortgages, and car loans), credit cards, personal budgeting and cost of living realities; often provided in conjunction with career awareness and career goal setting</p> <p>Example: Credit for Life Fair Educational Opportunity Centers (EOCs) across the state offer ongoing workshops and trainings. http://www.fafsaday.org/docs/EOC_locations.pdf</p>	<p>Students are given an introduction to concepts via a workshop or fair. These activities provide an excellent opportunity for an integrated activity with math classes. Students need activities/problems to practice the concepts rather than just listening to a lecture.</p>
Workshop/ Training Topics: Work-Readiness Training	<p>A program of study with curricula designed to prepare students for the world of work, with an emphasis on the foundation skills needed to be successful in most workplaces.</p>	<p>Workshops and classes require students to complete products or participate in activities in order to practice skills and reinforce learning. Activities are ideally evaluated via a rubric and students are given the feedback necessary to improve the quality of their products/activities.</p>
Workshop/ Training Topics: Resume Writing, Job Search and Interviewing Skills	<p>Workshops, classes, events or coaching focused on resume writing, job search strategies and interviewing skills. May include mock interviews with professionals from the community, peer-to-peer resume review and other opportunities for practice and feedback.</p>	<p>Workshops and classes require students to complete products or participate in activities in order to practice skills and reinforce learning. Activities are ideally evaluated via a rubric and students are given the feedback necessary to improve the quality of their products/activities.</p>

Category and Type of Activity	Activity Definition and Examples	Key Characteristics Duration/Time and Other Features
Contextual Learning Coursework	<p>Contextual learning involves projects completed in classrooms or out-of-school time programs that apply academic skills to a real-life context in the school, community or workplace. Contextual learning covers a wide range of possible projects, including many that are directly or indirectly career related.</p> <p>Examples: Students design museum exhibits for a local history museum, applying skills in writing, research, history and literature to a real-life context.</p>	<p>To be included as a career exploration activity, projects should explicitly identify career-related information, build career skills and/or explore career options, and should be measured by a grading rubric or the MA Work-Based Learning Plan.</p> <p>See the Contextual Learning Portal at http://resources21.org/cl for examples and guidelines.</p> <p>For community college and adult education programs: <i>The Transformation Agenda</i> (MCCWDTA) http://mccwdta.org/ online curriculum modules provide extensive units, projects, and lessons on specific industry sectors; the curricula are contextualized toward industry sectors in Massachusetts.</p> <p><i>Adult Career Pathways Training and Support Center (ACP-SC)</i> website: http://www.acp-sc.org offers trainings, resources, support, curricula, and current information on career pathways</p> <p><i>The Center for Adult English Language Acquisition (CAELA) Life Skills, College, and Career Readiness Guide for ESOL Students:</i> http://www.sabes.org/curriculum/esol/caela-guide-2011.pdf offers useful ideas for classroom activities that promote college and career readiness. The guide can also be used to inform curriculum development and lesson planning.</p> <p><i>The Integrating College and Career Awareness into the ABE/ESOL Classroom Curriculum Guide:</i> http://www.sabes.org/workforce/integrating-career-awareness.pdf is available for educators to use as a whole or in part as it includes useful tools, templates, and resources for teachers to use in the classroom or for guidance counselors and advisors to use with students one-on-one.</p>
Community Service/ Service Learning	<p>Community service learning involves projects and curricula designed to respond to compelling community need that lend themselves to career exploration as students interface with adults whose jobs pertain to the challenge in question.</p>	<p>A range of formats, from semester-long courses to single projects, apply to service projects; they constitute career exploration when deliberately designed to highlight occupations and industries associated with the topic for service learning. Ideally a product is developed during the service project with which students demonstrate their learning and their reflections.</p>

Category and Type of Activity	Activity Definition and Examples	Key Characteristics Duration/Time and Other Features
Informational Interviews	A one-on-one or small group interview, in which a student or job seeker asks a professional questions about his or her career. Interviews may be in person, on the phone or online.	Questions are researched and prepared ahead of time, answers are recorded and a reflection is written, with adult staff support.
Job Shadow Days	A career exploration activity in which students spend several hours or more at a workplace following and observing an employee through his or her work day. Example: Groundhog Day Job Shadow Program	Job shadow experiences are usually several hours long, with opportunity for reflection after the experience. Students should follow up by writing thank you notes to their hosts and by writing about the experience in a reflection essay, journal, portfolio and/or in their college and career plan.
Career Immersion		
Capstone Projects / Senior Projects	Major projects that bring together skills and knowledge from across subject areas and domains. Often completed in senior year, these projects may include performing a hands-on project, writing a research paper, researching related career options and developing a portfolio of project materials. The parameters of these projects may vary from one school to another, but share the idea that students devote several months to a project with a final product and complementary research, reflection and other writing. Examples: See the Contextual Learning Portal and search for projects tagged as Capstone or Senior-Projects.	Capstone projects are typically a quarter or semester-long project for academic credit; minimum is typically defined in relation to number of hours needed for credit by the school offering the opportunity.
Career Academies and Career Majors	A school or a program of study within a school organized around a career theme. Schools offer dedicated courses on the career theme as well as integration of academic courses with the career theme. (For example, a physics class may examine properties of sound as applied to music in an arts-related academy.) Examples: STEM Academies Arts-themed high school Technology-themed high school Other career-themed schools	Generally, the program of study is at least two years long, with at least one career-related course in each year, with career related courses complemented by integration of academic and career themes.

Category and Type of Activity	Activity Definition and Examples	Key Characteristics Duration/Time and Other Features
Career Clubs	<p>After-school or other clubs that provide students the opportunity to practice career-related skills; meet professionals in their field of interest and connect with other students with similar interests.</p> <p>Examples: SKILLS USA Robotics Clubs Engineering Clubs Future Educators of America</p>	<p>Students attend a series of meetings (after-school, summers, weekly, monthly, etc. for a semester or mini-semester or longer.)</p>
Career-Focused Electives	<p>Classes on specific career-related topics, including engineering, technology, computer technology, the arts, design, childcare, business, accounting and other topics.</p> <p>Examples: Accounting Child Development Graphic Design Introduction to Engineering Web Design</p>	<p>In order to constitute a career immersion activity, career-focused electives need to incorporate an experiential element and allow students to practice professional and technical skills. Examples could include students working on authentic projects in their career area, connecting with local professionals and/or participating in related work experience, such as a childcare center for childcare courses or tax assistance program for accounting courses.</p>
CVTE (Career Vocational Technical Education) courses	<p>A program of study in a career/vocational technical field, at a high school with recognized vocational-technical programs. In Massachusetts, CVTE programs are regulated and approved by M.G.L. Chapter 74, and are therefore often referred to as “Chapter 74 programs” and “Non-Chapter 74 programs.” Other terms include vocational-technical education, Career and Technical Education (CTE) as well as Career/Vocational Technical Education (CVTE).</p> <p>Examples: Automotive Technology Carpentry Culinary Arts Design and Visual Communications Information Services Support and Networking Telecommunications</p> <p>Others: see http://www.doe.mass.edu/cte for a list of programs</p>	<p>See the Career/Vocational Technical Education pages on the ESE website http://www.doe.mass.edu/cte/</p>

Category and Type of Activity	Activity Definition and Examples	Key Characteristics Duration/Time and Other Features
CVTE Cooperative Education	Structured workplace experiences that are part of a Career/Vocational Technical Education Program.	Read more about Cooperative Education Career/Vocational Technical Education on the ESE website http://www.doe.mass.edu/cte/programs/
Entrepreneurship Programs	<p>Programs in which students plan and operate entrepreneurial projects.</p> <p>Examples: National Foundation for Teaching Entrepreneurship, Junior Achievement</p>	These programs are typically a semester or summer-long project. Standards are set by the program. Ideally students are offered opportunities to address a wide range of information relating to business formation, and learn about the careers associated with entrepreneurship. Students are given opportunities for reflection about their entrepreneurial projects.
Mentorship Programs	Programs that connect students with adults in workplaces who serve as mentors and who introduce students to their workplace and its industry while developing a supportive personal relationship	There is a wide range of these kinds of programs. They ideally take place over many weeks, a semester, or a full academic year.
Skills Portfolios	<p>An organized collection of samples of student work, which may include writing, project photos, a resume and other materials, bringing together experiences and accomplishments from a variety of school, workplace and/or community settings.</p> <p>Examples: In some schools, students produce digital portfolios that highlight projects done over their four years of high school. Students in other schools produce writing portfolios with a variety of writing samples in different genres and/or from different subject areas. Students may also produce a portfolio for a specific subject area, such as an engineering or art portfolio.</p>	To constitute a portfolio, students gather several products together in an organized format. Ideally, products are selected by the student and reflect accomplishments over more than one year or from more than one subject area, course or setting.

Category and Type of Activity	Activity Definition and Examples	Key Characteristics Duration/Time and Other Features
Work-Based Learning (Job/ Internship)	<p>A workplace experience designed to help students gain work experience, build skills and/or explore career options. May include internships, summer jobs, afterschool jobs, school-based enterprises and volunteer work. In Massachusetts, Work-Based Learning experiences are often structured by the Work-Based Learning Plan, which provides a job description, list of skills/tasks, and performance evaluation.</p> <p>Examples: Connecting Activities job/internship placements YouthWorks summer jobs For-credit internships offered by high schools.</p>	<p>Work-based learning usually extends for at least 40 hours over at least four or more weeks; often a full summer, semester or year or longer. Students must perform work in a workplace or work-like setting, with genuine job responsibilities toward customers, co-workers and/or supervisor.</p> <p>Design of role at workplace may involve “job-carving”, i.e. creating, modifying, or customizing a job to match the student’s unique abilities, skills, and preferences, while simultaneously meeting the needs of an employer. Job carving typically involves conducting a task analysis of a job by breaking it down into a series of smaller steps.</p>

Appendix A

Massachusetts Definition of College and Career Readiness Overview

Massachusetts students who are college and career ready will demonstrate the knowledge, skills and abilities that are necessary to successfully complete entry-level, credit-bearing college courses, participate in certificate or workplace training programs, and enter economically viable career pathways. In order to meet this goal, the Commonwealth has defined a set of learning competencies, intellectual capacities and experiences essential for all students to become lifelong learners; positive contributors to their families, workplaces and communities; and successfully engaged citizens of a global 21st century.

Beyond achieving college and career ready levels of competence in English Language Arts / Literacy and Mathematics, all high school students should develop a foundation in the academic disciplines identified in the MassCore course of study, build competencies for workplace readiness as articulated in the Integrating College and Career Task Force Report, and focus on applying academic strategies to problem solving in diverse professional and life contexts, appropriate to individual student goals.

Massachusetts will use its 2011 curriculum frameworks, which include the Common Core State Standards, as the basis for an educational program that provides students with the academic knowledge, skills and experiences that are essential to postsecondary educational, career, and personal success.

Essential Competencies

Learning

Students who are college and career ready in English Language Arts / Literacy will demonstrate the academic knowledge, skills, and practices necessary to enter into and succeed in entry-level, credit-bearing courses in College English Composition, Literature, or technical courses; certificate or workplace training programs requiring college-level reading and writing; or a comparable entry-level reading and writing course at the institution. College and career ready students in English Language Arts/ Literacy will be **academically prepared** to:

- Read and comprehend a range of sufficiently complex texts independently
- Write effectively when using and/or analyzing sources
- Build and present knowledge through research and the integration, comparison, and synthesis of ideas
- Use context to determine the meaning of words and phrases

Similarly, students who are college and career ready in Mathematics will demonstrate the academic knowledge, skills, and practices necessary to enter into and succeed in entry-level, credit bearing courses in College Algebra, Introductory College Statistics, or technical courses; certificate or workplace training programs requiring an equivalent level of mathematics; or a comparable entry-level math course at the institution. College and career ready students in Mathematics will be **academically prepared** to:

- Solve problems involving the major content with connections to the mathematical practices
- Solve problems involving the additional and supporting content with connections to the mathematical practices
- Express mathematical reasoning by constructing mathematical arguments and critiques
- Solve real world problems, engaging particularly in the modeling practice

Successful achievement of specified levels of competence in English Language Arts / Literacy and Mathematics will be required for students to be placed into entry-level courses in college or participate in certificate or workplace training programs without the need for remediation.

Workplace Readiness

Student preparation for college and career should emphasize career awareness, exploration and immersion as well as development of the foundational knowledge and skills necessary to successfully navigate the workplace. College and career ready students will demonstrate:

Work Ethic and Professionalism

- Attendance and punctuality expected by the workplace
- Workplace appearance appropriate for position and duties
- Accepting direction and constructive criticism with a positive attitude and response

- Motivation and taking initiative, taking projects from initiation to completion
- Understanding workplace culture, policy and safety, including respecting confidentiality and workplace ethics

Effective Communication and Interpersonal Skills

- Oral and written communication appropriate to the workplace
- Listening attentively and confirming understanding
- Interacting with co-workers, individually and in teams

Proficiency in these skills is common for success in all workplaces and should be viewed as the foundation upon which additional workplace and career skills are added based on the specifics of any job.

Qualities and Strategies

Preparation for college and career should help students develop a wide range of quantitative and qualitative abilities that go beyond the minimum levels of competence needed for entry-level college courses and employment. In high school, students should demonstrate:

- Higher order thinking skills of analysis, synthesis, and evaluation
- The ability to think critically, coherently, and creatively
- The ability to direct and evaluate their own learning, be aware of resources available to support their learning, and have the confidence to access these resources when needed.
- Motivation, intellectual curiosity, flexibility, discipline, self-advocacy, responsibility, and reasoned beliefs

Together these attributes provide the framework for college and career readiness and support educational and workplace success as well as serve as the basis for being an active participant in our democracy.

Appendix B

OVERARCHING MISSION: SUCCESS AFTER HIGH SCHOOL

- We will ensure that Massachusetts students are prepared for success and opportunities after high school – including career and higher education opportunities.
- The state's Task Force on Integrating College and Career Readiness recommended creating a statewide system of structured, aligned, and strategic partnerships to support each

student's transition from the K–12 system through post-secondary education and into successful careers.

- Action steps include:
 - Incorporating career readiness into the state's recommended course of study (MassCore);
 - Strengthening school, employer, higher education, and community partnerships;
 - Improving the utilization of school counselors in the deployment of career readiness education;
 - Incentivizing schools to create and demonstrate comprehensive career readiness strategies;
 - Promoting the importance of college and career readiness for all students;
 - Explicitly identifying ESE personnel responsible for effectively executing the recommendations.

Being college and career ready means that a student has the knowledge, skills and experiences necessary for success in postsecondary education and economically viable career pathways in a 21st century economy.

Additional resources

[ESE's College and Career Readiness page](#)

[Task Force Report on Integrating College and Career Readiness](#)

Strategies to achieve this mission

- Build on existing programming to expand career development models
- Identify and extract career ready “power standards”
- Identify a wide range of local formative and summative assessments that have potential to measure career readiness standards
- Establish an “Employer Champions” group
- Develop a toolkit and resources for all partners to access information
- Expand Connecting Activities capacity to prepare and place students in a variety of career development activities
- Increase professional development opportunities
- Increase number of counselors using YourPlanForTheFuture.org
- Develop and launch competitive funding opportunities
- Make statewide tools and resources available online to promote readiness for college and careers
- Sponsor statewide summits for educators, employers, and workforce

Appendix C

CDE Guide Benchmarks Summary

The Massachusetts Career Development Education (CDE) benchmarks are offered as guidelines for establishing career development programs that purposely link career development interventions to learner outcomes that will contribute to helping all students become future ready. They establish a common language and direction for CDE data collection, evaluation, and documentation of best practices.

Organized under three domains (academic/technical, personal/social, workplace readiness) and across four developmental levels (elementary, middle school, high school, postsecondary) the CDE benchmarks support the development of lifelong learning.

	Benchmarks	Competencies
ACADEMIC-TECHNICAL DEVELOPMENT	Learners will develop and demonstrate: A1: 21 st century academic, technical and employability skills for success in school and in the workplace;	A1-1: Flexible, higher order thinking skills (<i>e.g., project management, leadership, problem solving</i>)
		A1-2: Technical and technological skills (<i>e.g., blueprint reading and computer software management</i>)
		A1-3: Skills in locating and using information resources for research (<i>e.g., libraries, Internet</i>)
	A2: strong academic, technical, and employability skills for career and life management;	A2-1: Communication and literacy skills for self-advocacy and presentation (<i>e.g., college and job interviews</i>)
		A2-2: Mathematical life skills for time and money management
		A2-3: Organizational skills for career and life management
		A2-4: Critical thinking skills to use and evaluate information (<i>e.g., evaluating credit card offers</i>)
		A2-5: Technical literacy for career and life management (<i>e.g., online banking, managing FAFSA online</i>)
	A3: knowledge of how education and work are interrelated and contribute to the economy and society;	A3-1: Knowledge of how educational and workplace demands relate to economic and societal needs and functions (<i>e.g., outsourcing, medical research</i>)
		A3-2: Skills in researching and evaluating economic and societal information for career planning and career management
	A4: an appreciation for the relevance of education in their lives (<i>i.e., answering, "Why do I need to know this?"</i>).	A4-1: Knowledge of the benefits of education for career and life management
		A4-2: Knowledge of the benefits of education for personal and professional satisfaction
		A4-3: Skills in maximizing educational and workplace achievement for employability, work satisfaction, and optimal earning potential

WORKPLACE READINESS DEVELOPMENT	Learners will develop and demonstrate: W1: knowledge and skills in the planning and decision-making process;	W1-1: Skills in the planning process (<i>focusing on the importance of preparation and future orientation</i>)
		W1-2: Knowledge of decision-making as a complex process
		W1-3: Skills and strategies for effective decision-making (<i>including rational, intuitive and consultative styles</i>)
		W1-4: Skills in evaluating career plans and decisions in relation to aptitudes, values, and interests
		W1-5: Skills in establishing and modifying career management tools (<i>e.g., resume, portfolio</i>)
		W1-6: Skills to plan and navigate career transitions
	W2: an exploratory attitude toward self, life and the world of work;	W2-1: Skills and attitudes for developing and maintaining the identity of a learner for life
		W2-2: Knowledge of how and where to access career and labor market information
		W2-3: Skills to both utilize and evaluate career information, resources, and experts in career planning
	W3: workplace specific knowledge and skills for employability and career advancement;	W3-1: Knowledge of performance assessments measure learning and productivity
		W3-2: Knowledge of the concepts of career pathway development, labor market demand and job retention
		W3-3: Knowledge of risks and rewards of various careers
		W3-4: Knowledge and skills necessary for employment, retention and advancement
		W3-5: Knowledge of the transferability of skills and its value
	W4: an awareness of social and cultural conditions that affect career decision-making and workplace success;	W4-1: Knowledge of the interrelationship of life roles
		W4-2: Skills in managing competing life roles at home, school, work, and in the community
		W4-3: Knowledge of the impact of cultural stereotyping and gender-based roles in relation to career decisions and occupational success
	W5: knowledge of all aspects of an industry , service, trade or occupation.	W5-1: Knowledge of the structures, dynamics and opportunities within industries and organizations
		W5-2: Knowledge of industries' role in local, national, and global arenas
		W5-3: Skills to locate, understand, evaluate, and use safety information

PERSONAL/SOCIAL DEVELOPMENT	Learners will develop and demonstrate: PS1: attitudes, behaviors, knowledge and skills that promote identity formation, personal responsibility and self-direction;	PS1-1: Skills in developing and maintaining a clear and positive self-concept (<i>with an increasingly more differentiated and affirmative view of oneself</i>)
		PS1-2: Skills in relating individual learning styles, interests, values, and aptitudes to one's concept of self
		PS1-3: Attitudes and skills for personal responsibility and self-determination
		PS1-4: Skills in applying personal ethics in all settings
	PS2: attitudes, behaviors, and interpersonal skills to work and relate effectively with others;	PS2-1: Skills in interacting positively with others at home, at school, at work, and in the community
		PS2-2: Skills in problem-solving and conflict resolution at home, at school, at work, and in the community
		PS2-3: Knowledge of and respect for individual differences
		PS2-4: Knowledge of how positive behaviors and attitudes contribute to educational achievement and workplace success
	PS3: attitudes, behaviors and skills necessary for managing personal and environmental variables that impact career development;	PS3-1: Knowledge and skills in maintaining personal and psychological well-being (<i>e.g., locating information, services, support; stress management skills</i>)
		PS3-2: Knowledge and skills for evaluating and responding to social and economic influences at home, school, work, and in the community (<i>e.g., postsecondary planning based on financial need; exploring transportation options for summer employment</i>)
	PS4: attitudes, behaviors and skills that foster respect for diversity and work to eliminate stereotyping (at home, school, work and in the community).	S4-1: Knowledge and skills that promote participation, positive behavior and regard within diverse groups (<i>e.g., Gay Straight Alliance</i>)
		PS4-2: Knowledge and skills for communicating and working positively in diverse settings (<i>e.g., speaking a second language; seeking balanced representation on group projects</i>)