Vocational Technical Education Framework

Strand Four

Employability and Career Readiness Knowledge and Skills

June 2014
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Acknowledgements

The Massachusetts Department of Elementary and Secondary Education, Office for Career/Vocational Technical Education, launched the Vocational Technical Education Framework Revision Project in April 2012. This Framework is the result of that effort and of the contributions of many educators across the state. The Department of Elementary and Secondary Education wishes to thank all of the Massachusetts groups that contributed to the development of these standards and all the individual teachers, administrators, and private sector advisory committee members who provided valuable employer validation of the standards for Strand Four: Employability and Career Readiness Knowledge and Skills.

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Dear Colleagues,

I am pleased to present to you the *Massachusetts Vocational Technical Education Frameworks*, adopted by the Department of Elementary and Secondary Education in June 2014. These frameworks, one for each of the 44 vocational technical programs, include standards in multiple strands representing all aspects of the industries that students in the vocational technical education program are preparing to enter.

The frameworks also include a crosswalk between the technical standards and relevant standards in Massachusetts Curriculum Frameworks to support effective integration of academic and technical content.

The comments and suggestions received during revision of the 2007 *Massachusetts Vocational Technical Education Frameworks* have strengthened these frameworks. We will continue to work with schools and districts to implement the 2014 *Massachusetts Vocational Technical Education Frameworks* over the next several years, and we encourage your comments.

I want to thank everyone who worked with us to create challenging learning standards for Massachusetts students. I am proud of the work that has been accomplished.

Sincerely,

Mitchell D. Chester, Ed.D.
Commissioner of Elementary and Secondary Education
Introduction

Overview & Organization and Key Changes

Overview

The Massachusetts Department of Elementary and Secondary Education understands the necessity of maintaining current Vocational Technical Education Frameworks which ensure career/vocational technical education students across the Commonwealth are taught the most rigorous standards aligned to the needs of business and industry.

With the advent of the Massachusetts Teaching & Learning System the Office for Career/Vocational Technical Education (CVTE) recognized the significance of including career/vocational technical education in the system and developed a comprehensive plan for including vocational technical education. The plan was designed in a Two Phase Process. Phase One included the revision of strands two, three, and six, of all of the Vocational Technical Education Frameworks. Phase Two consisted of three major components (projects) all equally crucial;

1. The revision of Strands One, Four, and Five to complete the revision of all six strands of the Vocational Technical Education Frameworks;

2. Statewide Professional Development on all revised strands, with training on strands two, three, and six delivered fall 2013, and training on strands one, four, and five delivered spring 2014;

3. The creation and development of additional Model Curriculum Unit (MCU) Teams.

The Office for Career/Vocational Technical Education Framework Team, with support from consultants, began Phase One in the 2012-2013 school year, to revise three of the six strands contained in all of the Vocational Technical Education (VTE) Frameworks. The state was organized into “Collaborative Partnerships” comprised of teams of project administrators, highly qualified subject matter educators, and business and industry partners, whose task was to revise Strand Two – Technical, Strand Three – Embedded Academics, and Strand Six – Technology Literacy. Each team met with a vocational advisory committee which included business and industry representatives and postsecondary education professionals, whose mission was to review and revise the team’s draft document during the revisionary process. Once strand two was revised, academic teachers (typically one English Language Arts teacher, one Mathematics teacher, and one Science teacher) worked with the technical subject matter teachers to develop a crosswalk between academic curricula standards and the technical standards, and provided examples of embedded academic content.

The Office for Career/Vocational Technical Education solicited statewide input from technical and academic teachers and administrators at the annual Massachusetts Association of Vocational Administrators (MAVA)/Massachusetts Vocational Association (MVA) - Connecting for Success Conference. Each framework team met with their content colleagues and reviewed the draft revisions and obtained
valuable feedback. Additionally, all drafts were reviewed and revised by the Massachusetts Vocational Technical Teacher Testing Program, to ensure appropriate measurable language.

Project consultants designed a new template to ensure all framework teams entered new standards and additional resources in a consistent manner. The framework teams created an “Appendix” listing potential industry recognized credentials attainable by secondary students; lists of professional, student, and relevant government organizations; and useful resources and websites. *It is important to note that although most Framework Teams provided information for the “Appendix”, not all teams did. Therefore, subheadings within the “Appendix” without information have been deleted.*

Disclaimer: Reference in the Appendices Section to any specific commercial products, processes, or services, or the use of any trade, firm or corporation name is for the information and convenience of the public, and does not constitute endorsement or recommendation by the Massachusetts Department of Elementary and Secondary Education.

The Office for Career/Vocational Technical Education facilitated a comprehensive vetting process throughout the Commonwealth. During the fall of 2012 districts throughout Massachusetts solicited feedback from each Vocational Program’s Advisory Committee members at the Fall Board meetings. Additionally, the Office for Career/Vocational Technical Education met with various licensing boards at the Massachusetts Division of Professional Licensure and provided the applicable draft framework to each board for review. All framework drafts were posted on the CVTE website for public comment. Comments and suggested revisions received were shared with each framework team for response and edits, as appropriate.

The Phase I Process was completed on an accelerated timetable and resulted in all Vocational Technical Education Frameworks; Stand Two and Strand Six, revised with current, rigorous, relevant standards. Strand Three has been redesigned into a crosswalk which directly correlates academic and technical standards. An appendix of useful material for technical teachers recommended by their peers was added to each framework.

Phase II of the Framework Revision Process consisted of three major projects;

1. The Strands One, Four & Five Project, to complete the revision of all six strands of the Vocational Technical Education Frameworks;
2. Statewide Professional Development on all revised strands, with training on strands two, three, and six delivered fall 2013, and training on strands one, four, and five delivered spring 2014;
3. The creation and development of additional Model Curriculum Unit (MCU) Teams.

The Strands One, Four, & Five Project began in the fall of 2013 with the formation of a leadership team and three work groups. Co-Managers led the leadership team comprised of three Strand Coordinators who facilitated work teams and reviewed, researched, and revised these common strands. All skills specific to the vocational technical program have been included into Strand Two Technical.

The Strand One Team revised the safety knowledge and skills that all students need to acquire. The team included relevant issues (i.e., bullying, climate), laws, regulations, guidelines and policies pertaining to safety.
The Strand Four Team revised the Employability Knowledge and Skills that all students need to acquire. Teams considered current research on career readiness, including the work of the College Career Readiness Task Force convened by the Department, changes in workplace, technological changes that impact how people perform their work (i.e., communications methods), and included standards that emphasize the need for lifelong learning and adaptability given the multiple career changes over and an individual's working life. The team recommended this strand be renamed to: Career Readiness.

The Strand Five Team revised the Management & Entrepreneurship Knowledge and Skills that all students need to acquire. All business owners and employees must possess management and financial skills to be productive members of society. Skills included financial knowledge and basic business management skills.

All Strand One, Four and Five Project Teams worked collaboratively with staff from the Department of Elementary and Secondary Education and the Advisors of the Massachusetts Career and Technical Student Organizations to crosswalk standards to national Career & Technical Student Organizations Curricula, as applicable.

The Office for Career/Vocational Technical Education contracted the MAVA Consultant Team to work closely with the office to complete all of the work accomplished during Phase II of the Project.

A remarkable amount of work was accomplished through the efforts of hundreds of professionals who collaborated and diligently supported this work. The Office for Career/Vocational Technical Education is grateful for all the support received from the field, particularly all of the teachers (technical and academic), administrators, advisory committee members, business and industry representatives, the Division of Professional Licensure - boards, the Massachusetts Association of Vocational Administrators, the MAVA Consultants, and the Massachusetts Vocational Association, whose contributions were tremendous.

Special thanks to all staff in the Office for Career/Vocational Technical Education and the CVTE Framework Revision Team who provided guidance and numerous contributions during Phase One of the project.
Organization and Key Changes

This section contains the following:

- Highlights of Changes to the Vocational Technical Education Frameworks; which includes a summary of changes made to each strand.
- Organization of the Frameworks – Strand Two illustrates structure of topic headings, standards and objectives, and performance examples.

Highlights of Changes to the Vocational Technical Education Frameworks:

Strand One:

Safety and Health Knowledge and Skills have been revised to contain the safety standards that are common to all programs. The Strand One Team worked collaboratively with staff from the Department of Elementary and Secondary Education and the Advisors of the Career and Technical Student Organizations (CTSO) to crosswalk standards to national CTSO Curricula, as applicable.

- No objectives were deleted, only modified.
- Language and wording was clarified.
- Additions included a focus on maintaining a safe school and workplace in terms of creating a positive climate/environment.
- Student safety credential program has been revised.
- Safety attire has been revised.
- Emergency equipment and fire safety has been revised.
- Many new Performance Examples have been included.
- Within each strand, standards and objectives were grouped under Topic Headings, which are displayed in bold. Each standard is followed by a performance example. See the section below titled: “Organization of the Frameworks – Strand Two”. All strands were organized in that manner, with the exception of the former Strand Three.

Strand Two:

The Technical Standards Knowledge and Skills have been revised to reflect business and industry changes since the adoption of the 2007 Vocational Technical Education Frameworks (VTEF). There are additional changes to Strand Two below:

- The Technical Knowledge and Skills (Strand Two) section contains standards specific to the particular vocational program; suffix “a” (as common to all programs) and suffix “c” (as common within a cluster) have been removed.
- Each VTEF Strand Two begins with safety and health knowledge and skills specific to the particular vocational program.
- Within each strand, standards and objectives were grouped under Topic Headings, which are displayed in bold. Each standard is followed by a performance example. See the section below
Strand Two of the Frameworks for Animal Science, Environmental Science and Technology, and Horticulture, begin with core standards required for all participants in the programs, followed by a series of standards organized in concentrations. See the section below titled: “Organization of the Frameworks – Strand Two” for more information.

An update to some of the vocational programs framework is the addition of advanced or supplemental standards which are noted in Strand Two by an asterisk (*). These standards are not required, but are provided as suggestions that districts may choose to use to increase the depth of a particular topic, or add additional topics, particularly for advanced students or for those seniors who do not participate in cooperative education. See the section below titled: “Organization of the Frameworks – Strand Two” for more information.

Strand Three:

Since the purpose of Strand Three was to correlate academic content that was embedded in the knowledge and skills necessary to perform certain technical skills, it was logical to highlight those connections through a crosswalk between the academic curriculum standards and the technical standards (Strand Two). The crosswalk directly correlates the English Language Arts (2011) and Mathematics (2011) Frameworks, incorporating the Common Core Standards and the Science and Technology/Engineering Frameworks. The crosswalk can be found in the appendix of each vocational framework. The crosswalk also includes performance examples which illustrate integrated academic and technical content.

- Embedded Academics has been replaced with a crosswalk between the academic curriculum standards and the technical knowledge and skills standards. The crosswalk is located in the Appendices.

Strand Four:

Employability (and Career Readiness) Knowledge and Skills focused on providing students with general knowledge and skills to be college and career ready. The Strand Four Team worked collaboratively with staff from the Department of Elementary and Secondary Education and the Advisors of the Career and Technical Student Organizations to crosswalk standards to national CTSO Curricula, as applicable.

- Language and wording were clarified.
- Additions included a focus on providing students with skills for employability/career readiness.
- New Performance Examples have been included.
- Within each strand, standards and objectives were grouped under Topic Headings, which are displayed in bold. Each standard is followed by a performance example. See the section below titled: “Organization of the Frameworks – Strand Two”. All strands were organized in that manner, with the exception of the former Strand Three.
Strand Five:

Strand Five contains Management and Entrepreneurship Knowledge and Skills that are general for all students. The Strand Five Team worked collaboratively with staff from the Department of Elementary and Secondary Education and the Advisors of the Massachusetts Career and Technical Student Organizations to crosswalk standards to national Career & Technical Student Organizations Curricula, as applicable.

- Language and wording were clarified and organized into a logical format.
- The Strand Five Team felt that the 2007 curriculum remained valid.
- Additions included a focus on providing students with skills for management and entrepreneurship applicable to all vocational programs.
- New Performance Examples have been included.
- Within each strand, standards and objectives were grouped under Topic Headings, which are displayed in bold. Each standard is followed by a performance example. See the section below titled: “Organization of the Frameworks – Strand Two”. All strands were organized in that manner, with the exception of the former Strand Three.

Strand Six

Strand Six Technology Literacy Knowledge and Skills has been replaced with the 2008 Massachusetts Technology Literacy Standards and Expectations Framework.
Appendix

Each framework contains an “Appendix” section which includes an Embedded Academic Crosswalk, Industry Recognized Credentials, Statewide Articulation Agreements, Professional, Governmental, and Student Organizations, Resources, and relevant websites.

The Appendix contains:

- Embedded Academic crosswalks for English Language Arts, Mathematics, and Science & Technology/Engineering.
- Statewide Articulations: Current statewide Articulation Agreements and/or Apprenticeship Programs available to the specific vocational program are listed on this page. The development of new statewide articulations continues, and therefore these pages will be revised as new agreements are finalized.

- Industry-Recognized Credentials: Technical Teacher Teams generated lists of credentials for the vocational programs. Program Advisory Committees throughout the state reviewed and provided recommendations through the validation process. The credential list has been provided as a resource only and districts are not obligated to provide all of the specified credentials for students.

- Other: These pages provide lists of reference materials, government agencies, professional and student organizations, and useful websites created by each framework team. These are intended as helpful resources for technical teachers, identified by peers. These are not recommended or required by the Department of Elementary & Secondary Education.

Note: Although most Framework Teams provided information for the “Appendix”, not all teams did. Therefore, sub-headings within the “Appendix” without information have been deleted.

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Organization of the Frameworks – Strand Two

The Vocational Technical Education Frameworks contain knowledge and skills covering all aspects of industry, reflected in six strands: Safety and Health, Technical, Embedded Academics, Employability, Management and Entrepreneurship, and Technological.

Within each strand, standards and objectives were grouped under topic headings, which are displayed in bold. Each standard is followed by a performance example. In the excerpt below, 2.A is the topic; 2.A.01 is the first standard and 2.A.01.01 and 2.A.01.02 are the objectives under that standard.

2.A  Automotive Technology Specific Safety Practices

2.A.01  Identify and describe safety procedures when dealing with different types of automotive lifts according to current industry standards.
2.A.01.01  Demonstrate procedures for safe lift operations.
2.A.01.02  Demonstrate safe use, placement and storage of floor jacks and jack stands.

2.A.01  Performance Example:

- Student will set up lift using manufacturer’s suggested lift points.

2.A.02  Demonstrate and describe safety procedures when dealing with high pressure systems including necessary ventilation according to current industry standards.
2.A.02.01  Describe and demonstrate the importance of safety procedures to be used when servicing high pressurized systems (fuel systems, brakes, air conditioning, suspension, hydraulic systems, etc.).
2.A.02.02  Describe and demonstrate safe use of oxygen/acetylene torches and electric welding equipment.
2.A.02.03  Demonstrate ventilation procedures to be followed when working in the lab/shop area.

2.A.02  Performance Example:

- Student will relieve fuel system pressure to perform necessary repairs.

2.A.03  Identify and describe safety procedures when dealing with electrical circuits according to current industry standards.
2.A.03.01  Describe safety procedures to be followed when servicing supplemental restraint systems.
2.A.03.02  Demonstrate safety awareness of high voltage circuits of electric or hybrid electric vehicles and related safety precautions.

2.A.03  Performance Example:

- Safely disable Supplemental Restraint System (SRS) air bag for repair using manufacturer’s recommendations.

There are additional changes to some of the Frameworks Strand Two (Technical Knowledge and Skills). Specifically, Strand Two of the Frameworks for Animal Science, Environmental Science and Technology and Horticulture begin with core standards required for all participants in the programs, followed by a series of standards organized in concentrations. For example, Strand Two of the Horticulture Framework begins with the core standards required of all Horticulture students.

**Advanced / Supplemental Standards (Not Required)**

Another variation that is new to the revised Strand Two Frameworks is the addition of advanced or supplemental standards which are noted with the use of an asterisk (*). *These standards are not required, but are provided as suggestions that districts may choose to use to increase the depth of a particular topic, or add additional topics, particularly for advanced students or for those seniors who do not participate in cooperative education.*

The following is an example from Automotive Technology, where entire topics were added:

*Advanced Automotive Technology Technical Knowledge and Skills*

*Note: The following competencies are optional, supplementary competencies suitable for advanced students. These are not required.*

**2.CC Demonstrate appropriate engine repair techniques.**

2.CC.01 Perform appropriate cylinder Head Repair.

2.CC.01.01* Diagnose, remove and replace cylinder head(s).

2.CC.01.02* Clean and visually inspect a cylinder head for cracks; check gasket surface areas for warpage and surface finish; check passage condition; determine necessary action.

The following is an example from the Strand Two Radio and Television Broadcasting Framework that shows the addition of an advanced objective, 2.B.04.08*:

**2.B.04 Explain concepts fundamental to shooting in cinema and video.**

2.B.04.01 Compare and contrast a single-camera and a multiple-camera production.

2.B.04.02 Explain the importance of shooting for the edit (i.e., match on action, sequencing, coverage).

2.B.04.03 Explain the importance of continuity.

2.B.04.04 Explain the 180° Rule line, and its application in various cinema scenarios.

2.B.04.05 Identify and establish a specific point-of-view when shooting from a script.

2.B.04.06 Analyze the methods in which specific shots can evoke emotion from an audience.

2.B.04.07 Define drop frame and non-drop frame code shooting and explain how to account for both when preparing for an edit.

2.B.04.08* Describe various cinematographic methods necessary when shooting scenes that incorporate post-production visual effect

**2.B.04 Performance Examples:**

- Students will list similarities and differences of single-camera and multiple-camera shoots.
- Students will describe multiple shooting considerations that are useful in streamlining the editing process.
### Strand 4: Employability and Career Readiness

#### 4.A Career Exploration and Navigation

<table>
<thead>
<tr>
<th>4.A.01</th>
<th>Develop a career plan and portfolio.</th>
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<tbody>
<tr>
<td>4.A.01.01</td>
<td>Develop and revise career plan annually based on workplace awareness and skill attainment.</td>
</tr>
<tr>
<td>4.A.01.02</td>
<td>Assess personal strengths and interest areas to determine potential careers, career pathways and career ladders.</td>
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<tr>
<td>4.A.01.03</td>
<td>Examine potential career field(s)/discipline(s) and identify criteria to select, secure and keep employment in chosen field(s).</td>
</tr>
<tr>
<td>4.A.01.04</td>
<td>Research and evaluate a variety of careers utilizing multiple sources of information and resources to determine potential career(s) and alternatives.</td>
</tr>
<tr>
<td>4.A.01.05</td>
<td>Identify training and education requirements that lead to employment in chosen field(s) and demonstrate skills related to evaluating employment opportunities.</td>
</tr>
<tr>
<td>4.A.01.06</td>
<td>Explore and evaluate postsecondary educational opportunities including degrees and certifications available, traditional and nontraditional postsecondary pathways, technical school and apprenticeships, cost of education, financing methods including scholarships and loans and the cost of loan repayment.</td>
</tr>
<tr>
<td>4.A.01.07</td>
<td>Create a portfolio showcasing academic and career growth including a career plan, safety credential, resume and a competency profile demonstrating the acquisition of the knowledge and skills associated with at least two years of full-time study in the Chapter 74 program.</td>
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<tr>
<th>4.A.02</th>
<th>Demonstrate job search skills.</th>
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<tbody>
<tr>
<td>4.A.02.01</td>
<td>Conduct a job search and complete written and electronic job applications, resumes, cover letters and related correspondence for a chosen career path.</td>
</tr>
<tr>
<td>4.A.02.02</td>
<td>Explore and evaluate postsecondary job opportunities and career pathways specific to career technical areas.</td>
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<tr>
<td>4.A.02.03</td>
<td>Identify role and use of social media and networking for staying current with career and employment trends as well as networking, job seeking and career development opportunities.</td>
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<tr>
<td>4.A.02.04</td>
<td>Demonstrate ability to use social media and networking to develop useful occupational contacts, job seeking and career development opportunities.</td>
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<tr>
<th>4.A.03</th>
<th>Demonstrate all phases of the job interview process.</th>
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<tbody>
<tr>
<td>4.A.03.01</td>
<td>Gather relevant information about potential employer(s) from multiple print and digital sources, assessing the credibility and accuracy of each source.</td>
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</tbody>
</table>
4.A.03.02 Identify employment eligibility criteria, such as drug/alcohol free status, clean driving record, etc.

4.A.03.03 Practice effective interviewing skills: appearance, inquiry and dialogue with interviewer, positive attitude and evidence of work ethic and skills.

4.A.03.04 Explore and evaluate employment benefit packages including wages, vacation, health care, union dues, cafeteria plans, tuition reimbursement, retirement and 401K.

4. A Performance Examples:
- Conduct research to analyze and present on specific careers within a cluster.
- Conduct web-based job search using sites such as Monster.com, CareerBuilder.com, Indeed.com, Snagajob.com, Simplyhired.com and others.
- Create profile on social media/networking site such as LinkedIn and/or LinkedIn University for postsecondary research and employment opportunities.
- Complete online job application.
- Conduct and videotape practice interviews for instructor and student analysis.
- Provide students with sample employment and benefit packages for evaluation.

4.B Communication in the Workplace

4.B.01 Demonstrate appropriate oral and written communication skills in the workplace.

4.B.01.01 Communicate effectively using the language and vocabulary appropriate to a variety of audiences within the workplace including coworkers, supervisors and customers.

4.B.01.02 Read technical and work-related documents and demonstrate understanding in oral discussion and written exercise.

4.B.01.03 Demonstrate professional writing skills in work-related materials and communications (e.g., letters, memoranda, instructions and directions, reports, summaries, notes and/or outlines).

4.B.01.04 Use a variety of writing/publishing/presentation applications to create and present information in the workplace.

4.B.01.05 Identify, locate, evaluate and use print and electronic resources to resolve issues or problems in the workplace.

4.B.01.06 Use a variety of financial and data analysis tools to analyze and interpret information in the workplace.

4.B.01.07 Orally present technical and work-related information to a variety of audiences.

4.B.01.08 Identify and demonstrate professional non-verbal communication.

4.B.02 Demonstrate active listening skills.

4.B.02.01 Listen attentively and respectfully to others.

4.B.02.02 Focus attentively, make eye contact or other affirming gestures, confirm understanding and follow directions.

4.B.02.03 Show initiative in improving communication skills by asking follow-up questions of speaker in order to confirm understanding.
### 4.C Work Ethic and Professionalism

<table>
<thead>
<tr>
<th>4.C.01</th>
<th>Demonstrate attendance and punctuality.</th>
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<tbody>
<tr>
<td>4.C.01.01</td>
<td>Identify and practice professional time-management and attendance behaviors including punctuality, reliability, planning and flexibility.</td>
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<tr>
<th>4.C.02</th>
<th>Demonstrate proper workplace appearance.</th>
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<tr>
<td>4.C.02.01</td>
<td>Identify and practice professional appearance specific to the workplace.</td>
</tr>
<tr>
<td>4.C.02.02</td>
<td>Identify and practice personal hygiene appropriate for duties specific to the workplace.</td>
</tr>
<tr>
<td>4.C.02.03</td>
<td>Identify and wear required safety gear specific to the workplace.</td>
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<tr>
<th>4.C.03</th>
<th>Accepts direction and constructive criticism.</th>
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<tbody>
<tr>
<td>4.C.03.01</td>
<td>Demonstrate ability (both verbally and non-verbally) to accept direction and constructive criticism and to implement solutions to change behaviors.</td>
</tr>
<tr>
<td>4.C.03.02</td>
<td>Ask appropriate questions to clarify understanding of feedback.</td>
</tr>
<tr>
<td>4.C.03.03</td>
<td>Analyze own learning style and seek instructions in a preferred format that works best for their understanding (such as oral, written or visual instruction).</td>
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<tr>
<th>4.C.04</th>
<th>Demonstrate motivation and initiative.</th>
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<tr>
<td>4.C.04.01</td>
<td>Evaluate assigned tasks for time to completion and prioritization.</td>
</tr>
<tr>
<td>4.C.04.02</td>
<td>Demonstrate motivation through enthusiasm, engagement, accurate completion of tasks and activities.</td>
</tr>
<tr>
<td>4.C.04.03</td>
<td>Demonstrate initiative by requesting new assignments and challenges.</td>
</tr>
<tr>
<td>4.C.04.04</td>
<td>Explain proposed solutions to challenges observed in the workplace.</td>
</tr>
<tr>
<td>4.C.04.05</td>
<td>Demonstrate the ability to evaluate multiple solutions to problems and challenges using critical reasoning and workplace/industry knowledge and select the best solution to the problem.</td>
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**4.B Performance Examples:**
- Read and analyze technical instructions to learn what makes them effective.
- Read and analyze technical instructions to follow directions and/or solve a problem.
- Examine a technical document and use it to write a set of instructions for another student to follow and evaluate.
- Analyze websites for effective technical writing and design.
- Create brochures and presentations using software and/or Web 2.0 tools to convey technical information.
- Conduct research using the Internet, print documents, observations and interviews to create a technical guide.
4.C.04.06 Implement solution(s) to challenges and/or problem(s) observed in the workplace.
4.C.04.07 See projects through completion and check work for quality and accuracy.

4.C.05 Demonstrate awareness of workplace culture and policy.
   4.C.05.01 Display ethical behavior in use of time, resources, computers and information.
   4.C.05.02 Identify the mission of the organization and/or department.
   4.C.05.03 Explain the benefits of a diverse workplace.
   4.C.05.04 Demonstrate a respect for diversity and its benefit to the workplace.

4.C.06 Interact appropriately with coworkers.
   4.C.06.01 Work productively with individuals and in teams.
   4.C.06.02 Develop positive mentoring and collaborative relationships within work environment.
   4.C.06.03 Show respect and collegiality, both formally and informally.
   4.C.06.04 Explain and follow workplace policy on the use of cell phones and other forms of social media.
   4.C.06.05 Maintain focus on tasks and avoid negative topics or excessive personal conversations in the workplace.
   4.C.06.06 Negotiate solutions to interpersonal and workplace conflicts.

4.C. Performance Examples:
- Complete a learning style analysis tool.
- Develop a rubric to assess work ethic and professionalism as detailed in the standards above.

**Student Organizations**

Business Professionals of America  www.bpa.org

**Selected Websites**

- 5 Ways to Ace a Job Interview:  http://kidshealth.org/teen/school_jobs/jobs/tips_interview.html
- Career One Stop:  http://www.careeronestop.org/
- Career Plan:  http://www.doe.mass.edu/cd/plan/intro.html
- Career Plan Model:  http://www.doe.mass.edu/ccr/epp/samples/cpmodel_11x17.pdf
- Career Tech: [http://www.okcareertech.org/cac/Pages/resources_products/ethics_web_sites.htm](http://www.okcareertech.org/cac/Pages/resources_products/ethics_web_sites.htm)
- Interaction in the Workplace: [http://hrweb.berkeley.edu/guides/managing-hr/interaction/communication](http://hrweb.berkeley.edu/guides/managing-hr/interaction/communication)
- ILP Resources Home Page: [http://www.ncwd-youth.info/ilp](http://www.ncwd-youth.info/ilp)
- Interview Skills Lesson Plans: [http://www.amphi.com/media/1220281/interview%20skills%20lesson%20plan.doc](http://www.amphi.com/media/1220281/interview%20skills%20lesson%20plan.doc)
- Maine Community College System – Center for Career Development: [http://www.ccd.me.edu/careerprep/CareerPrepCurriculum_LP-6.pdf](http://www.ccd.me.edu/careerprep/CareerPrepCurriculum_LP-6.pdf)
- Massachusetts Work-Based Learning: [http://skillspages.com/masswbl](http://skillspages.com/masswbl)
- North Dakota Association of Agriculture Educators: [http://www.ndaae.org/attachments/File/Preparing_students_for_a_Job_Interview.pptx](http://www.ndaae.org/attachments/File/Preparing_students_for_a_Job_Interview.pptx)
- Purdue OWL Job Search Resources (for writing resumes, applications, and letters): [https://owl.english.purdue.edu/engagement/34/](https://owl.english.purdue.edu/engagement/34/)
- Workplace Communication: [http://www.regionalskillstraining.com/sites/default/files/content/WC%20Book%201.pdf](http://www.regionalskillstraining.com/sites/default/files/content/WC%20Book%201.pdf)
- Your Plan For the Future: [http://www.yourplanforthefuture.org](http://www.yourplanforthefuture.org)