Integrating Employability Skills
A Framework for All Educators

PROFESSIONAL LEARNING MODULE

Integrating Employability Skills: A Framework for All Educators

JULY 2015
About This Booklet

This *Integrating Employability Skills: A Framework for All Educators Handouts* booklet is intended for use with the following additional resources:

- *Integrating Employability Skills: A Framework for All Educators* sample agenda
- *Integrating Employability Skills: A Framework for All Educators* slide presentation

Adapting This Booklet

This booklet is designed so that facilitators can adopt it as written or modify the content to reflect state and local context, needs, and priorities. If modifications to content are made, the CCRS Center and GTL Center requests that the following disclaimer be included in the revised materials:

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Integrating Employability Skills: A Framework for All Educators
Handouts

July 2015

College and Career Readiness and Success Center
Center on Great Teachers and Leaders
RTI International

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Handout 1. Employability Skills Framework: Definitions

Note: The content of this handout is adapted from the [Employability Skills Framework website](#).

Employability skills are general skills that are necessary for success in the labor market at all employment levels and in all sectors.

These skills, which may be taught through the education and workforce development systems, fall into three broad categories:

- **Effective Relationships**—The interpersonal skills and personal qualities that enable individuals to interact effectively with clients, coworkers, and supervisors
- **Workplace Skills**—The analytical and organizational skills and understandings that employees need to successfully perform work tasks
- **Applied Knowledge**—The thoughtful integration of academic knowledge and technical skills, put to practical use in the workplace

Within each of these three categories, there are nine sets of skills, detailed on the following pages.

<table>
<thead>
<tr>
<th>Category</th>
<th>Skills</th>
</tr>
</thead>
</table>
| Effective Relationships | • Interpersonal Skills  
|                      |     • Personal Qualities                   |
| Workplace Skills     | • Resource Management                      |
|                      | • Information Use                          |
|                      | • Communication Skills                     |
|                      | • Systems Thinking                         |
|                      | • Technology Use                           |
| Applied Knowledge    | • Applied Academic Skills                  |
|                      | • Critical Thinking Skills                 |
Effective Relationships

Interpersonal Skills
Interpersonal skills enable employees to collaborate as a member of a team or work independently, as appropriate, and contribute to the overarching goals of the workplace. They include the following:

- Understands teamwork and works with others
- Responds to customer needs
- Exercises leadership
- Negotiates to resolve conflicts
- Respects individual differences

Personal Qualities
Personal qualities include a set of behaviors and skills that enable employees to establish effective relationships and function appropriately in the workplace. They include the following:

- Demonstrates responsibility and self-discipline
- Adapts and shows flexibility
- Works independently
- Demonstrates a willingness to learn
- Demonstrates integrity
- Demonstrates professionalism
- Takes initiative
- Displays positive attitude and sense of self-worth
- Takes responsibility for professional growth
Workplace Skills

Resource Management

Resource management skills enable employees to perform work tasks successfully by managing time and other resources. They include the following:

- Manages time
- Manages money
- Manages materials
- Manages personnel

Information Use

Information use skills enable employees to perform work tasks successfully by understanding, evaluating, and using a variety of information. They include the following:

- Locates information
- Organizes information
- Uses information
- Analyzes information
- Communicates information

Communication Skills

Communication skills enable employees to perform work tasks successfully by communicating effectively with others in multiple formats. They include the following:

- Communicates verbally
- Listens actively
- Comprehends written material
- Conveys information in writing
- Observes carefully

Systems Thinking

Systems thinking skills enable employees to perform work tasks successfully by understanding relationships among the components of a system. They include the following:

- Understands and uses systems
- Monitors systems
- Improves systems
Technology Use

Technology use skills enable employees to perform work tasks successfully by applying information technology appropriately and effectively. They include the following:

- Understands and uses technology

Applied Knowledge

Applied Academic Skills

Applied academic skills enable employees to put skills based on academic disciplines and learning—such as reading, writing, mathematical strategies and procedures, and scientific principles and procedures—to practical use in the workplace. They include the following:

- Uses reading skills
- Uses writing skills
- Uses mathematical strategies and procedures
- Uses scientific principles and procedures

Critical Thinking Skills

Critical thinking skills enable employees to think critically and creatively in the context of their work, solve work-based problems, and make sound decisions at work. They include the following:

- Thinks critically
- Thinks creatively
- Makes sound decisions
- Solves problems
- Reasons
- Plans and organizes
# Handout 2. Employability Skills Framework: Source Matrix

<table>
<thead>
<tr>
<th>Resource</th>
<th>Applied Knowledge</th>
<th>Effective Relationships</th>
<th>Workplace Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Applied Academic Skills</td>
<td>Critical Thinking Skills</td>
<td>Interpersonal Skills</td>
</tr>
<tr>
<td>21st Century Skills for Workplace Success, NOCTI</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Arizona’s New Workplace Skills, Arizona Department of Education</td>
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<tr>
<td>Assessing 21st Century Skills, Board on Testing and Assessment, the National Research Council</td>
<td>X</td>
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<tr>
<td>Assessment and Teaching of 21st Century Skills, Cisco, Intel, and Microsoft</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Career Clusters Framework, National Association of State Directors of Career Technical Education Consortium</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Citizenship Foundation Skills and Knowledge Clusters, U.S. Citizenship and Immigration Services</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Common Employability Skills, National Network of Business and Industry Associations</td>
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<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Resource</td>
<td>Applied Academic Skills</td>
<td>Critical Thinking Skills</td>
<td>Interpersonal Skills</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------------</td>
<td>--------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Comparative Analysis of Soft Skills: What is Important for New Graduates?</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Employability Assessment Rubric, Chicago Public Schools</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Employability Skills 2000+ Conference Board of Canada</td>
<td>X</td>
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<td>X</td>
</tr>
<tr>
<td>Employability Skills Blueprint, SkillsUSA</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Equipped for the Future, Center for Literacy Studies, University of Tennessee</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Industry Competency Models, Employment Training Administration U.S. Department of Labor</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Maryland Skills for Success, Maryland State Department of Education</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>National Career Readiness Certificate, ACT</td>
<td>X</td>
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<td>X</td>
</tr>
<tr>
<td>National Work Readiness Credential</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>O*NET, Employment and Training Administration, U.S. Department of Labor</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Partnership for 21st Century Skills</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Resource</td>
<td>Applied Knowledge</td>
<td>Effective Relationships</td>
<td>Workplace Skills</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------</td>
<td>--------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td>Applied Academic Skills</td>
<td>Critical Thinking Skills</td>
<td>Interpersonal Skills</td>
</tr>
<tr>
<td>Secretary’s Commission on Achieving Necessary Skills (SCANS), U.S. Department of Labor</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Workforce Skills Certification System, CASAS and Learning Resources, Inc.</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Handout 3. Employability Skills Framework: Using the Lesson Planning Checklist as a Self-Assessment Tool

Introduction

Employability skills are a critical component of college and career readiness, and the education and workforce communities are increasing their focus on how these skills can be embedded into instructional practice at all levels and in all content areas. The Employability Skills Framework, an initiative of the U.S. Department of Education, defines employability skills as the “general skills that are necessary for success in the labor market at all employment levels and in all sectors.” These skills fall into three categories: applied knowledge, effective relationships, and workplace skills (Figure 1).

Figure 1. Employability Skills Framework
This self-assessment tool is designed to help educators reflect on the extent to which they are already embedding employability skills into instruction and the opportunities for further embedding these skills.

Overview

Employability skills often are integrated into academic and technical skill instruction and are not intended to be taught on their own. In other words, teachers are not asked to add employability skills to their list of teaching responsibilities but merely to seek opportunities to emphasize the skills when possible. Other guidelines to keep in mind when teaching employability skills are as follows:

- Employability skills, along with academic and technical skills, are a critical component of college and career readiness.
- Documenting employability skills that are embedded in classroom practice helps students to realize the connection between education and employment.
- Opportunities exist for teachers to integrate employability skills in everyday lessons, at every age, and in every content area.
- Development of employability skills does not occur in one or two classes but grows during a student’s educational career.
- Classroom activities can emphasize various employability skills, but not all skills can be addressed in every lesson.

The Lesson Planning Checklist from the Employability Skills Framework is a tool to support the instruction and assessment of employability skills. Teachers can use it to document how employability skills are being reinforced in the classroom as a planning and reflection tool and as a vehicle for communicating with parents, students, employers, their peers, and other stakeholders. State and local administrators can use the tool to inform curriculum development, classroom observations, and professional development activities and as confirmation of classroom practice through teachers’ self-reports.
Self-Assessment Exercise

The purpose of this exercise is to reflect on the extent to which employability skills are embedded in teachers’ instructional practice, using the Lesson Planning Checklist as a guide. Because employability skills can be taught in different ways and in different contexts, this exercise allows teachers to share strategies for teaching certain skills and identifying any gaps in practice. It does not assume that a single teacher would embed every skill in each lesson. This exercise can be repeated on an ongoing basis (e.g., monthly) to reflect on how employability skills are embedded into instruction over time.

The self-assessment has three parts:

- Part 1: Use the Lesson Planning Checklist to self-assess the extent to which employability skills are embedded into instruction.
- Part 2: Reflect on self-ratings and make plans to address any skills that are not being embedded.
- Part 3: Discuss strategies for teaching employability skills with colleagues.

Part 1: Use the Lesson Planning Checklist as a Self-Assessment Tool

Using the charts of employability skills on pages 4–11, think about whether these skills are reflected in your current instructional practice. Although the Lesson Planning Checklist is intended for use at different levels—such as a lesson, unit, or standards—for self-assessment purposes, it may be helpful to think about a group of lessons to see how employability skills are embedded throughout a unit. Think about whether a skill or multiple skills are addressed in the lessons, meaning that students have the opportunity to display these skills in a way that is obvious to an observer. Give yourself 1 point for every “yes” in a section. Use the last column (“Description of Activity”) to record notes about how the skills are being taught.

Rating Scale

Yes, this skill is embedded in most activities in this lesson. Students have opportunities to learn about, practice, or demonstrate this skill during most of the instructional time (2 points).

Yes, this skill is embedded in some of the activities in this lesson. Students have opportunities to learn about, practice, or demonstrate this skill during some of the instructional time (1 point).

No, this skill is not embedded in activities during this lesson (0 points).
## Applied Academic Skills

<table>
<thead>
<tr>
<th>Skills</th>
<th>Sample Classroom Applications</th>
<th>Yes, Embedded in Most Activities</th>
<th>Yes, Embedded in Some Activities</th>
<th>No, Not Embedded in Any Activities</th>
<th>Description of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading skills</td>
<td>Students apply or demonstrate reading skills by interpreting written instructions or project directions and constructing responses, interpreting technical language, using print and online materials as resources, completing worksheets, and seeking clarification about what they have read.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Writing skills</td>
<td>Students rely on writing skills to construct lab reports, posters, and presentation materials; take notes; and compose responses to essay questions.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Mathematics strategies and procedures</td>
<td>Students use computational skills appropriately and make logical choices when analyzing and differentiating among available procedures. These skills occur in real-world contexts that integrate academic skills in authentic situations in all classes, including mathematics, science, language arts, and social sciences.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Scientific principles and procedures</td>
<td>Students follow procedures, experiment, infer, hypothesize (even as simple as “what if we do it this way”), and construct processes to complete a task. This work can occur outside of mathematics and science classes.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL POINTS__________**
## Critical Thinking Skills

<table>
<thead>
<tr>
<th>Skills</th>
<th>Sample Classroom Applications</th>
<th>Yes, Embedded in Most Activities</th>
<th>Yes, Embedded in Some Activities</th>
<th>No, Not Embedded in Any Activities</th>
<th>Description of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinks creatively</td>
<td>Students create innovative and novel ideas or solutions and display divergent thinking. This thinking can be seen in oral presentations, creative-writing assignments, open-ended tasks, and project design.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Thinks critically</td>
<td>Students display analytical and strategic thinking. This thinking can be seen in debating an issue, converging on an understanding, assessing a problem, and questioning (e.g., playing devil’s advocate).</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Makes sound decisions</td>
<td>Students differentiate between multiple approaches and assess options.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Solves problems</td>
<td>Students assess problems involving the use of available resources (i.e., personnel and materials) and review multiple strategies for resolving problems.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Reasons</td>
<td>Students negotiate pros and cons of ideas, approaches, and solutions and analyze options using “if-then” rationale.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Plans and organizes</td>
<td>Students plan steps, procedures, or approaches for addressing tasks. This planning occurs naturally in most assignments, ranging from solving one problem to completing a long-term project.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL POINTS:__________
### Interpersonal Skills

<table>
<thead>
<tr>
<th>Skills</th>
<th>Sample Classroom Applications</th>
<th>Yes, Embedded in Most Activities</th>
<th>Yes, Embedded in Some Activities</th>
<th>No, Not Embedded in Any Activities</th>
<th>Description of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understands teamwork and works with others</td>
<td>Students participate in cooperative groups or with a partner, contribute fairly to the task, and show respect to others.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Responds to customer needs</td>
<td>Students help fellow students understand tasks, find resources, and fulfill assigned roles (e.g., by thinking of fellow students as customers).</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Exercises leadership</td>
<td>Students participate as team leaders or effective team members in project assignments, and organize work and utilize team roles to meet project goals.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Negotiates to resolve conflict</td>
<td>Students keep team members on track, suggest alternatives, and discuss options. This work can be as much about agreement as conflict.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Respects individual differences</td>
<td>Students listen to and consider all team members’ ideas, respond supportively to ideas given in class or in teams, use proactive approaches to prevent conflict or misunderstanding, and work well with all teammates.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL POINTS:________**
## Personal Qualities

<table>
<thead>
<tr>
<th>Skills</th>
<th>Sample Classroom Applications</th>
<th>Yes, Embedded in Most Activities</th>
<th>Yes, Embedded in Some Activities</th>
<th>No, Not Embedded in Any Activities</th>
<th>Description of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrates responsibility and self-discipline</td>
<td>Students actively participate in class, asking questions, volunteering answers, completing and submitting assignments, and working well in groups.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Adapts and shows flexibility</td>
<td>Students adapt easily to different modes of instruction and different types of assignments.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Works independently</td>
<td>Students commit to time-on-task during class and begin work without hesitation.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Demonstrates a willingness to learn</td>
<td>Students are cooperative and noticeably engaged. They communicate with peers and superiors with respect and confidence, sharing information and feedback clearly and accurately.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Demonstrates integrity</td>
<td>Students treat work assignments with respect in that work is either original or credited correctly.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Demonstrates professionalism</td>
<td>Students treat others with respect and consider all ideas.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Takes initiative</td>
<td>Students seek out and take the opportunity to take on a leadership role on tasks and projects.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Displays a positive attitude and sense of self-worth</td>
<td>Students contribute new ideas or thinking to the class tasks, projects, or discussions.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Takes responsibility for professional growth</td>
<td>Students are active listeners, seeking clarification and understanding when needed.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL POINTS:**

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## Resource Management

<table>
<thead>
<tr>
<th>Skills</th>
<th>Sample Classroom Applications</th>
<th>Yes, Embedded in Most Activities</th>
<th>Yes, Embedded in Some Activities</th>
<th>No, Not Embedded in Any Activities</th>
<th>Description of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manages time</td>
<td>Students demonstrate time management when organizing and planning project activities with a team or when organizing and managing themselves and individual class assignments and homework. Time management is apparent in almost all assignments, which are completed on time and with high quality.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Manages money</td>
<td>Students manage money in group projects requiring allocation of limited finances and resources (e.g., designing or marketing a toy, flipping a house, or planning a trip).</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Manages resources</td>
<td>Students manage resources in projects requiring allocation of limited finances, resources (e.g., materials), and personnel.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Manages personnel</td>
<td>Students gain experience managing personnel (i.e., each other) in group projects requiring allocation of limited finances, resources (e.g., materials), and role assignments. They also manage their own behavior and participation.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL POINTS**  

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Integrating Employability Skills: A Framework for All Educators Handouts—15
| Manages personnel | Students gain experience managing personnel (i.e., each other) in group projects requiring allocation of limited finances, resources (e.g., materials), and role assignments. They also manage their own behavior and participation. | 2 | 1 | 0 |

**TOTAL POINTS:**_________
## Information Use

<table>
<thead>
<tr>
<th>Skills</th>
<th>Sample Classroom Applications</th>
<th>Yes, Embedded in Most Activities</th>
<th>Yes, Embedded in Some Activities</th>
<th>No, Not Embedded in Any Activities</th>
<th>Description of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locates</td>
<td>Students use analytical strategies to determine the best medium for finding necessary information.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Organizes</td>
<td>Students use any graphic organizer (e.g., outline, concept map, organization chart, or tables) to sort information or data.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Uses</td>
<td>Students use classification and analytic skills to determine the necessary information to complete task.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Analyzes</td>
<td>Students assess information to determine which is relevant (does not have to be a mathematical analysis).</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Communicates</td>
<td>Students summarize information to compose written or oral presentations, posters, reports, or slides. This work also can be as simple as a student explaining a problem in front of the class.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL POINTS**


### Systems Thinking

<table>
<thead>
<tr>
<th>Skills</th>
<th>Sample Classroom Applications</th>
<th>Yes, Embedded in Most Activities</th>
<th>Yes, Embedded in Some Activities</th>
<th>No, Not Embedded in Any Activities</th>
<th>Description of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understands and uses systems</td>
<td>Students understand their roles and assignments when collaborating as a team (e.g., system) and contribute to the organizational structure and function of the team.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Monitors systems</td>
<td>Students devise methods to assess team (e.g., system) progress.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Improves systems</td>
<td>Students negotiate midcourse corrections and adaptations to team (e.g., system) tasks if necessary.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL POINTS**

### Technology Use

<table>
<thead>
<tr>
<th>Skills</th>
<th>Sample Classroom Applications</th>
<th>Yes, Embedded in Most Activities</th>
<th>Yes, Embedded in Some Activities</th>
<th>No, Not Embedded in Any Activities</th>
<th>Description of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understands and uses technology</td>
<td>Students often rely on various digital technologies for calculating, collecting and displaying data, conducting research, creating presentations, and writing reports.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL POINTS**
**Scoring Guide**

Add up the total number of points from each of the sections and include them here.

<table>
<thead>
<tr>
<th>Skill Set</th>
<th>Category</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Academic Skills</td>
<td>Applied Knowledge</td>
<td>____/8</td>
</tr>
<tr>
<td>Critical Thinking Skills</td>
<td>Applied Knowledge</td>
<td>____/12</td>
</tr>
<tr>
<td>Interpersonal Skills</td>
<td>Effective Relationships</td>
<td>____/10</td>
</tr>
<tr>
<td>Personal Qualities</td>
<td>Effective Relationships</td>
<td>____/18</td>
</tr>
<tr>
<td>Resource Management</td>
<td>Workplace Skills</td>
<td>____/8</td>
</tr>
<tr>
<td>Information Use</td>
<td>Workplace Skills</td>
<td>____/10</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>Workplace Skills</td>
<td>____/10</td>
</tr>
<tr>
<td>Systems Thinking</td>
<td>Workplace Skills</td>
<td>____/6</td>
</tr>
<tr>
<td>Technology Use</td>
<td>Workplace Skills</td>
<td>____/2</td>
</tr>
</tbody>
</table>

**Part 2: Reflect on Self-Ratings**

Use the scoring guide to add up the total number of points from each section. As you review the results of the scoring guide, consider the following reflection questions:

1. Which employability skills are embedded in the selected lessons?
2. What strategies are you using to teach these skills?
3. Are you teaching skills from each of the three categories (applied knowledge, effective relationships, and workplace skills)?
   a. Is one category more represented in your instructional practice than others?
   b. Is any category less represented?
4. What skills are not embedded in the lessons? Why?
5. What support or training do you need to further embed employability skills into instruction?
6. In what other ways can these skills be embedded across your grade level or content area?
7. What can you do to ensure that employability skills are being reinforced in the classroom?
Part 3: Share Strategies for Embedding Employability Skills

Discuss the results of your self-assessment exercise with a colleague, with a focus on sharing strategies for embedding employability skills into lessons.

1. Identify which skills were embedded in the selected lessons.

2. Describe how you taught the identified skills.

3. Ask your colleague:
   a. Do you agree that these skills were present in the lessons? Are there other skills that you also see reflected?

   b. What are other ways that I can embed these skills? (Or, how have you taught these skills?)
Handout 4. Career and Technical Education Example Lesson Plan: Culinary Arts

Lesson: Food Preservation

Three Days or Class Periods Plus Extended Learning Projects

Grades 10–12

Objectives

- Students will learn about the role of safely managing bacteria in food, including common preservation techniques and sanitation practices.
- Students will analyze and synthesize multiple data points to describe how to maximize food safety over time with and without refrigeration.
- Students will work independently and take responsibility for their own learning.

Introduction

It is important that our food is safe to eat. Food becomes unsafe to eat or “goes bad” when it is stored in a way that allows too much bacteria to grow. Before refrigerators were common, people were able to store and save food safely through other methods like salting, smoking, and drying, which all inhibit bacteria growth. Keeping food at cold temperatures also helps to inhibit bacteria growth, which is why keeping food in the refrigerator or freezer helps it stay safe to eat for longer periods.

Materials

- Vocabulary definition lists
- Growth range and growth rate lists for common bacteria
- Lab refrigerator
- Gallon-size plastic storage bags
- Plastic gloves
- Lab food smoker
- Lab ovens
- Salt
- Various foods (e.g., red meat, poultry, fish, root vegetables, fruits, cream) that have been stored in various conditions for specific time ranges
- Various raw foods (e.g., meat and vegetables)
- Extended Learning Recipe Lab handout

**Standards**

- Local Culinary Operations Standards
  - 2.1 Identify personal behaviors that can contaminate food and violate health codes.
  - 2.2 Explain how sanitation and health codes apply to specific culinary and food-service operations.
  - 2.3 Summarize sanitation regulations and inspection requirements for receiving, preparing, storing, and serving food.

- National Standards for Family and Consumer Sciences (www.nasafacs.org)
  - 8.2 Demonstrate food safety and sanitation procedures.
    - 8.2.6 Demonstrate proper purchasing, receiving, storage, and handling of both raw and prepared foods.
    - 8.2.7 Demonstrate safe food handling and preparation techniques that prevent cross contamination from potentially hazardous foods, between raw and ready-to-eat foods, and between animal and fish sources and other food products.
    - 8.2.11 Demonstrate ability to maintain necessary records to document time and temperature control, HACCP, employee health, maintenance of equipment, and other elements of food preparation, storage, and presentation.

**Employability Skills**

- Applied Academic Skills
  - Uses reading skills
  - Uses writing skills
  - Mathematics strategies and procedures
  - Scientific principles and procedures

- Critical Thinking
  - Makes sound decisions
  - Reasons
  - Plans and organizes

- Personal Qualities
  - Demonstrates responsibility and self-discipline
  - Adapts and shows flexibility
  - Works independently
  - Demonstrates a willingness to learn
• Demonstrates professionalism
• Takes initiative
• Displays a positive attitude and sense of self-worth
• Takes responsibility for professional growth

• Information Use
  • Locates
  • Organizes
  • Uses
  • Analyzes
  • Communicates

Day 1
Assess Student Prior Knowledge
  • What are the signs that you have noticed when food has gone bad? Are these caused by bacterial or fungal growth?
  • What do you already know about safe food storage? How cold is your refrigerator or freezer typically? How long does food stay safe to eat in the refrigerator versus the freezer?
  • What internal temperatures do different kinds of foods need to be cooked to be safe to eat? Is this related to the safe temperatures for storing food?

Lecture on Bacterial Growth
  • Teacher gives a 10-minute slide presentation on bacteria, bacterial growth conditions, and multiplication rates as well as prevention strategies, including refrigeration/freezer temperatures, internal cooking temperatures, and food safety zone.
  • Teacher refers students to handout on bacteria growth and prevention strategies for future use.

Collaborative Student Work
  • Student groups are assigned four related vocabulary terms (e.g., smoking, drying, pickling, salting, and canning).
  • Student groups research their assigned terms and preservation methodologies using the National Restaurant Association ServSafe resources.
  • Student groups create five- to 10-minute group presentations on their assigned terms using slide presentation software, defining terms, explaining methodology, identifying how these practices inhibit bacterial growth, and describing the general effectiveness of these practices for keeping food safe to eat. Teacher reviews expectations for content, respect and professionalism in the presentations.
Days 2–3

Student Presentations

- Student groups present their slide presentations from the previous class.
- Students are able to ask questions of each group to clarify terms and processes.

Hands-On Matching Activity

- Teacher arranges foods that have been stored in various conditions for specific time ranges on lab tables in gallon size bags with labels (i.e., refrigerated at 72 hours at 55 degrees Fahrenheit or smoked at 200 degrees Fahrenheit for four hours).
- Students use bacterial growth conditions and rates handout and information from the presentations to assess whether the food is safe to eat. Students log observations about the food specimens. (NOTE: It is important that no tasting is permitted.)
- Students compare observation results on safe and unsafe foods in small groups, then groups share with the larger class. Teacher leads consensus discussion among students on which foods are safe to eat, borderline safe to eat, and unsafe to eat. Students provide reasoning and evidence for these claims and critique each others’ thinking.

Extended Student-Led Projects (Three Weeks)

Student Choice Lab

- Students choose a food preservation method to try during or outside of class time: pickling, smoking, drying, canning, or salting. Students locate suitable recipe and choose from open lab times to prepare and monitor food using their chosen method. Students write a summary report on their experience and present results to the class.

Recipe Lab

- Student groups are assigned recipe plans and situations (i.e., six-hour catered outdoor buffet), including at least one food preservation method other than refrigeration. Student groups work together using the ServSafe materials and bacterial growth conditions and rates handout to design a food management plan for storing, preparing, transporting, and serving the food safely. Student groups write up the food management plan and turn it into the teacher for accuracy.
Handout 5. General Education Example Lesson Plan: English Language Arts and Health and Physical Education Collaboration

Lesson: Create a Brochure for a Fitness Program

Four Days or Class Periods

Grades 9–10

Objective

- Students will use technical, clear, and persuasive language to advertise a free fitness program by creating a sample brochure for the program.
- Students will write for a specific purpose by integrating content from their English language arts (ELA) and health and physical education classes this year in describing their sample fitness program.
- Students will demonstrate their content learning in health and physical education.
- Students will demonstrate and build employability skills by collaboratively creating a product; specifically, students will demonstrate applied academic skills, interpersonal skills, and information use skills.

Introduction

Most writing is done for specific purposes. People write to explain how things work, share information, sell products, and shape others’ thinking. People also write in specific ways that fit the product: A tweet should be short and catchy, while a technical manual should be detailed and comprehensive. Many written products fall somewhere in between these examples. For instance, a website should be quick and easy to read, but it also should include the most relevant and important information the reader needs to know and should have this information clearly organized. In this lesson, we will explore and practice how to balance being clear and concise with providing the most important and contextually appropriate information. We also will explore the balance between being informative and being persuasive. We will practice this skill by writing a brochure, which is typically used to share key information in a brief and easy-to-read manner. Brochures that advertise a program or service also use persuasive language to interest readers in the program and explain its benefits. This project will require you to work together in teams, think creatively, synthesize multiple sources of information, and apply your learning from your health and physical education course.
Standards

- The Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science and Technical Subjects
  
  - CCSS.ELA-LITERACY.W.9-10.2
    Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.
  
  - CCSS.ELA-LITERACY.W.9-10.4
    Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
  
  - CCSS.ELA-LITERACY.W.9-10.5
    Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.
  
  - CCSS.ELA-LITERACY.W.9-10.6
    Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology’s capacity to link to other information and to display information flexibly and dynamically.

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- Employability Skills
  
  - Applied Academic Skills
    - Uses reading skills
    - Uses writing skills
  
  - Critical Thinking
    - Thinks creatively
  
  - Personal Qualities
    - Works independently
    - Takes initiative
    - Demonstrates responsibility and self-discipline
  
  - Interpersonal Skills
    - Understands teamwork and works with others
    - Responds to customer needs
    - Exercises leadership
    - Negotiates to resolve conflict
    - Respects individual differences
• Information Use
  o Locates
  o Organizes
  o Uses
  o Analyzes
  o Communicates

Materials

- Brochure samples
- Computer lab
- Health and physical education curriculum materials
- Writing samples

Preparation

Collaborative Planning Between ELA and Health and Physical Education Teachers

- At the beginning of the school year, agree to use this lesson together and coordinate or communicate about instructional schedules throughout the year as needed.
- Compile or update the outline of the content students will learn in health and physical education leading up to this lesson.
- Agree to a dual-grading plan, where the ELA teacher assesses writing and the health and physical education teacher assesses content. Students receive a grade for each class on the final product.
- Identify key employability skills topic and subtopic areas that will be emphasized in the lessons.

Day 1

Assess Student Prior Knowledge in Writing for a Purpose

- Review writing for a purpose. Brainstorm ways in which different things are written for a purpose (e.g., websites, user’s manual, tweet, blog post, newspaper article, interview, advertisement).
- Review writing samples (one of each of the previous examples) and ask students to describe the similarities and differences in the writing style (e.g., short versus long, informal versus formal, critical versus positive).
Brochure Discovery Activity

- Provide student groups with three sample brochures each: one informational medical brochure, one promotional brochure on a local commercial attraction, and one brochure for a free community center class.

- Students read the brochures and (1) describe the different purposes of the brochures and (2) pull out examples of how the writing accomplishes those purposes. Groups share out and discuss as a whole class.

Day 2

Link With Health and Physical Education

- Health and physical education teacher and ELA teacher introduce brochure-writing activity.

- Health and physical education teacher provides brief overview of content from the health and physical education course that can be integrated into the brochures (e.g., knowledge of specific sports, vocabulary used to describe fitness or health benefits).

- Assignments and grouping: ELA and health and physical education teacher present a list of 12 general fitness programs from which students can choose (e.g., swimming, tennis, yoga, baseball). Students draw numbers out of a hat and vote for which fitness program they wish to write a brochure on. There may be either two or three students per group (most groups will have three students).

Identifying Key Content Activity

- Using the class notes from Day 1, students review the health and physical education materials and make notes on key content that needs to be included in the brochure.

- Student groups use the following categories to organize the information: description of the fitness program, target audience and participants, fitness or health benefits, equipment and facilities needed, and possible “selling” language.

- Student groups share out and provide each other with feedback and questions.

Day 3

Student Work Time in Classroom

- Student groups work together on brochure content and design. The ELA teacher floats among groups to provide guidance and feedback. The health and physical education teacher visits for a few minutes to review student work so far and answer any content-specific questions.

Accomplishment Share Out

- Student groups share biggest accomplishment of the day’s work (e.g., finding the right “selling” message, refining the important information to include).
Day 4

Student Work Time in Computer Lab

- Student groups work together to finalize their brochure content and design using word-processing and design software. The ELA teacher floats among groups to provide guidance and feedback. Student groups save and e-mail final product to the teacher at the end of class.

- Students who complete their work early can begin their homework assignment, which involves finding three major opinion pieces on health and identifying the persuasive language that gives them an “angle.”