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Adult Education Partnership Day-- Cheyenne

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Career Infused Adult Education Resource Packet

TABLE OF CONTENTS

Career Awareness, Exploration, Self-Assessment and Planning

These resources can help your teachers help your students become aware of what high demand jobs are coming, explore what is entailed in and required by those jobs, assess their current skill levels in relation to a job they may want and plan how to attain the skills to qualify for that job.

Wyoming at work https://www.wyomingatwork.com/vosnet/Default.aspx

Wyoming at work responds to workforce challenges through high-quality services to individuals and businesses. The website includes a variety of resources and career information for job seekers in Wyoming

Labor Market Information (LMI) in Wyoming http://doe.state.wy.us/lmi/

LMI includes information on labor trends unemployment, job openings and high demand job projections. The projections for job openings can be found at http://doe.state.wy.us/lmi/projections.htm . The projections are helpful to both teachers and students to be informed about what jobs are coming open and how much they pay.

The O*Net http://www.onetonline.org/

 The O*NET program is the nation's primary source of occupational information. Central to the project is the O*NET database, containing information on hundreds of standardized and occupation-specific descriptors. The database, which is available to the public at no cost, is continually updated by surveying a broad range of workers from each occupation. Information from this database forms the heart of O*NET OnLine, an interactive application for exploring and searching occupations. The database also provides the basis for the Career Exploration Tools, a set of valuable assessment instruments for workers and students looking to find or change careers.

O*Net Resource Center-Related Sites http://www.onetcenter.org/links.html

 This webpage offers a good organizational framework of career-related resources including links to electronic tools, job accommodations, U.S. Department of Labor resources, Bureau of Labor Statistics resources, and others.

Career OneStop https://www.careeronestop.org/

Sponsored by the US Department of Labor, the website offers a variety of of information on career exploration, training, and jobs that can be filtered for Oregon.

Integrating Career Awareness into the ABE & ESOL Classroom https://www.collegetransition.org/career-pathways/publications/ica-curriculum-guide/

This is a ready-to-use, flexible curriculum that prepares adult educators to incorporate career awareness and planning into their instructional and counseling activities.

Strategies for Success in Career Development (Full Curriculum) Program Guide/Curriculum
http://www.womenemployed.org/sites/default/files/resources/StratForSuccessFullCurriculum2008.pdf

This guide gives colleges, community organizations, and workforce agencies helpful tools to guide adult learners or first-time college students at different levels of experience and education through in-depth career exploration and planning. The curriculum is designed to help more low-income adults transition into and complete college certificate or degree programs.

ACT World of Work Map http://www.act.org/wwm/index.html

The World-of-Work Map organizes occupations into six clusters (parallel to John Holland's six occupational types), 12 regions, and 26 career areas (groups of similar jobs). It graphically shows how occupations relate to each other according to primary work tasks. The Map is based in substantial research involving analysis of several key databases: expert ratings of basic work tasks from the Department of Labor's Occupational Information Network and ratings from the Department's Dictionary of Occupational Titles. Interest inventory scores of more than 200,000 persons in 640 occupations provide a third source of data. Vocational Information Center http://www.khake.com/index.html The Vocational Information Center website is an education directory that provides links to online resources for career exploration, technical education, work opportunities, trade and technical schools and related vocational learning resources.

GCF Learn Free Work & Career http://www.gcflearnfree.org/career

From job interview questions to tips for writing the winning resume, this website is packed with tutorials and activities to help with personal career development and training.

The Career Key™ http://www.careerkey.org

Organized according to the three basic principles of good decision making: 1. Know yourself - your strengths, values, personality, and skills. Take the Career Key test to discover which Holland personality types you are most like. (Take it free through American Education Services (AES) planner by clicking here.) Read about Holland's Theory of Career Choice. 2. Know your options. Learn more about the jobs that interest you. Learn about education options. 3. Make a good decision.

JobHunters Bible: Counseling, Testing, and Advice http://www.jobhuntersbible.com/counseling/index.php

This guide from the author of What Color is Your Parachute? incorporates his mega-list of job resources online with many of the self-assessment exercises and job searching hints from the book.

Today's Military http://www.todaysmilitary.com/

This website is produced by the United States Department of Defense. This site is not intended as a recruiting tool for any branch of the U.S. Military. Rather, it was developed as a resource for parents, educators and young adults curious about military service. Here you will find essential military career information, such as promotions, commissioning programs, military law and justice, assignments, and dress and appearance standards expected of military members.

Career One Stop Testing and Assessment Center
http://www.careeronestop.org/TESTING/TestingAssessmentHome.asp

Discover how pre-employment testing can help businesses find workers with the right skills. Job seekers can use self-assessments to gauge their skill levels and find where improvement is needed.

The Motivated Skills Test http://stewartcoopercoon.com/jobsearch/motivated-skills/

Career Resources for Job Seekers, free career resources for those who are changing jobs or careers.

ACT Occupational Profiles http://www.act.org/workkeys/occuprof/

Search occupations alphabetically. The profile includes the Title/O*NET Code, and the corresponding Career Cluster/Career Area related to the ACT World of Work Map. The Occupational profiles identify the skill levels required for an occupation across jobs, companies, or industries. Note: ACT reports the most recent five years of data. The occupational profiles were developed by combining information from the job profiles for groups of jobs that share the same identification numbers in the O*NET database. Line one is the median profile rounded to the nearest integer, line 2 contains the minimum and maximum skill levels required, and line 3 contains the number of jobs, by skill area, in the median.

Career Development for Diverse Audiences

Information Resources for the Homeless: Released convicts and other students

IMDiversity http://www.ibiblio.org/rcip/convicts.html

This website is a one-stop career and self-development site devoted to serving the cultural and career-related needs of all minorities. Sponsored by The Black Collegian, this is an excellent resource for all minority and diversity candidates. The many "villages" include resources and information specific for each group, and those without a separate village can find information in the global village.

Employment Information Handbook for Ex-Offenders http://www.doc.state.nc.us/Publications/DOL.Exoffender.Handbook.pdf

 This PDF produced by the U.S. Department of Labor in 2005 has more than 30 pages of information to help recently released ex-offenders prepare for a job search and transition back into life.
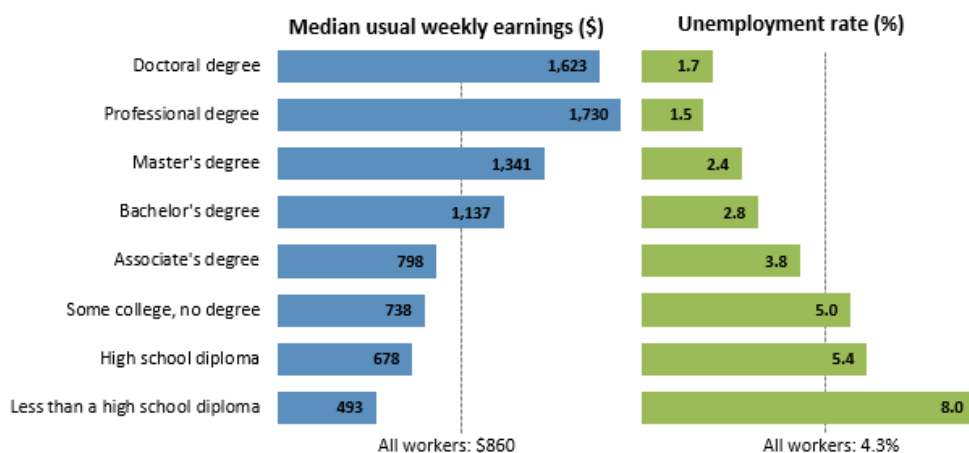
 Goodwill Industries International Inc. People with Criminal Backgrounds http://www.goodwill.org/goodwill-for-you/specialized-services/people-with-criminalbackgrounds/?gclid=CMvNlu7y4J4CFVw55QodnTEAKg&ES=Y&EST=%22ex+offenders%22

Multicultural Career Counseling Competence: 5 Key Tips for Improving Practice (NCDA) http://www.associationdatabase.com/aws/NCDA/asset_manager/get_file/9914/minimum_competencies_for_multi-cultural_career_counseling.pdf

https://www.bls.gov/careeroutlook/2016/data-on-display/education-matters.htm

Earnings and unemployment rates by educational attainment, 2015

	Median usual weekly earnings ($)	Unemployment rate (%)
Doctoral degree	1,623	1.7
Professional degree	1,730	1.5
Master's degree	1,341	2.4
Bachelor's degree	1,137	2.8
Associate's degree	798	3.8
Some college, no degree	738	5.0
High school diploma	678	5.4
Less than a high school diploma	493	8.0
	All workers: $860	All workers: 4.3%

Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.
Source: U.S. Bureau of Labor Statistics, Current Population Survey

Adult Career Pathways Training and Support Center http://www.acp-sc.org/resources/instruction

Lesson plans, curricula, course outlines, and bridge- related course materials organized by career cluster. You will need to register to access the content, but it is free.

Breaking Through: Contextualization Toolkit http://www.jff.org/sites/default/files/BT_toolkit_June7.pdf

This publication is a tool for helping instructors assist low-skilled adults gain postsecondary certificates and degrees through contextualized instruction. The toolkit addresses types of contextualized learning offered, how to do contextualized learning, strategies for engaging students in contextualized learning courses or programs, sustaining the contextualized learning course or program, and contextualization tools.

Contextualizing Adult Education Instruction to Career Pathways http://www-tcall.tamu.edu/docs/ContextualizatingAdultEdInstructionCareerPathways.pdf

This manual was developed through a joint effort by Job for the Future, Literacywork International, and the Career Ladders Project, with funding from the Texas Education Agency. It was created with the input, feedback, and support of many people, offered through face-to-face and virtual means.

Creating Career-Infused Classrooms: A Toolkit for Instructors
https://static1.squarespace.com/static/55a158b4e4b0796a90f7c371/t/56f9e2282fe131b0560666f6/1459217002638/contextinstructor-toolkit.pdf

This Toolkit provides programs with the tools needed to "infuse careers" throughout student learning plans. Specifically, the Toolkit focuses on how educators can contextualize instruction around the high demand jobs in an identified local service area.

Preparing Workers for the 21st Century

 https://llmcl422.weebly.com/soft-skills.html

This curriculum contextualizes employability skills to math, reading, and citizenship.

The Competency Model Clearinghouse
http://www.careeronestop.org/CompetencyModel/careerpathway/CPWGenInstructions.aspx

Competency models identify the knowledge, skills, and abilities necessary to successfully perform critical work functions in an industry or occupation. The Competency Model Clearinghouse offers the Building Blocks for Competency Models Tool to guide you through the creation of a competency model for an industry. This tool will enable you to create materials that assist businesses, educators, and workforce professionals in identifying the skills needed for success in 21st century careers.

GED Career Bridge to Hospitality Curriculum http://valrc.org/resources/instruction.html

This website includes the full curriculum for bridging GED instruction to hospitality careers. The site includes resources on workplace context, employment, vocabulary, GED Math, GED Writing, Reading Passages, GED Science and Social Studies, resources, and a student handbook.

GED PLUS College Preparation Program

http://www.floridatechnet.org/gedplus/

This program is designed to help adult students earn their GED credential with the knowledge, skills, and abilities to be successful in college and careers. The website includes a program implementation guide and curriculum resources.

Basics: ESOL Toolkit for General Construction, Landscaping, Painting and Plumbing

http://valrc.org/resources/instruction.html

This website includes hands-on, contextualized instructional materials for:
- **General Construction:** 1. Measurements & Dimensions, 2. Heavy Equipment, 3. Work Schedules, 4. Worker Rights
- **Landscaping:** 1. Trees and Shrubs, 2. Lawn Care, 3. Walkways, 4. My Yard
- **Painting:** 1. Choosing Your Colors, 2. Choosing the Right Paint, 3. Buying Paint, 4. Preparing to Paint, 5. Painting Safety
- **Plumbing:** 1. Help, Call the Plumber, 2. A Plumber's Tools, 3. A Plumber's Career, 4. Plumbing System Plan, 5. Pipe Fittings and Parts

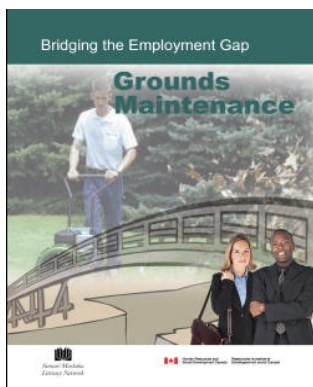**Bridging the Employment Gap: Janitorial**

http://literacynetwork.ca/wp-content/uploads/2014/06/bridgegap_manual_janitorial.pdf

This manual is part of Bridging the Employment Gap for Learners with Low Level Literacy Skills, a two-phase project begun in 2001. Phase 1 of the project focused on students with the lowest level literacy and basic skills, especially the developmentally challenged population. In Phase 2 the focus was expanded to include all Essential Skills Level 1 learners. The manuals include instructor notes, learning activities and learning demonstrations. The materials include five main units safety, understanding hazardous product labels, understanding signs, mopping following a pattern, garbage: bags and recycling, and step-by-step learning activities.

Bridging the Employment Gap: Clerical

http://literacynetwork.ca/wp-content/uploads/2014/06/bridgegap_manual_clerical.pdf

The manuals include instructor notes, learning activities and learning demonstrations for contextualizing literacy skills with clerical positions.

Bridging the Employment Gap: Grounds Maintenance

http://literacynetwork.ca/wp-content/uploads/2014/06/bridgegap_manual_grounds.pdf

The manuals include instructor notes, learning activities and learning demonstrations for contextualizing literacy skills with grounds maintenance jobs.

Bridging the Employment Gap: Kitchen Help

http://literacynetwork.ca/wp-content/uploads/2014/06/bridgegap_manual_kitchen.pdf

The manuals include instructor notes, learning activities and learning demonstrations for contextualizing literacy skills with kitchen assistant jobs.

Bridging the Employment Gap: Retail
http://literacynetwork.ca/wp-content/uploads/2014/06/bridgegap_manual_retail.pdf
The manuals include instructor notes, learning activities and learning demonstrations for contextualizing literacy skills with jobs in the retail field.

Medicine Plus
http://www.nlm.nih.gov/medlineplus/tutorials/
MedlinePlus is the National Institutes of Health's web site for patients and their families and friends. Produced by the National Library of Medicine, it provides information about diseases, conditions, and wellness issues in language you can understand. MedlinePlus offers reliable, up-to-date health information, anytime, anywhere, for free. MedlinePlus presents interactive health tutorials from the Patient Education Institute. Learn about the symptoms, diagnosis and treatment for a variety of diseases and conditions. Also learn about surgeries, prevention and wellness. Each tutorial includes animated graphics, audio and easy-to-read language.

ProjectCARE
http://projectcare.worlded.org/
This website includes four lessons (including activities, vocabulary practice, and evaluation) about caring for others while improving their communication with medical personnel. Topic areas are depression, Alzheimer's disease, alcohol abuse and Aacoholism, and death and dying. The website provides audio and video for listening practice, vocabulary development, project ideas and links to related-health information. There is an accompanying book as well as free activities available to learners.

Embedded Learning Portal
http://rwp.qia.oxi.net/embeddedlearning/index.cfm

The Portal in general can provide practitioners with numerous realistic workplace materials and sample tasks that can be used as they are or adapted for different populations. This resource from the United Kingdom provides an excellent approach to work-related contextualized literacy instruction and can be adapted to many levels of literacy and English language acquisition.

Ingenious Ways to Use Career Information
http://associationdatabase.com/aws/NCDA/pt/sd/news_article/5247/_self/layout_details/false

While there is ample career information available, pouring over virtual or actual pages of writing often does not hold students' attention for very long. Consider the following ideas as possible ways to enhance the use of career information.

National Career Development Guidelines Workforce Career Development Model Crosswalk
http://www.carocp.org/library/document/M4_counseling_career_matrix.pdf

National Career Development Guideline Lesson plans

XpMath
http://www.xpmath.com/careers/math_jobs.php

The database was designed to help the user explore a wide variety of jobs. It includes descriptions for 291 major jobs. These jobs together employ 88 percent of the American workforce. Job descriptions answer questions such as these: What do people in this job do all day? What math topics will I need on the job? How much does the job pay?

STEM Transitions
http://www.stemtransitions.org/using.php

The integrated project materials developed by the STEM Transitions initiative are intended as context-based teaching resources that demonstrate the convergence of technical and academic concepts. Over 60 projects have been developed for use in the community college classroom, although many of them can be easily modified by instructors for use at the high school level. The "projects" offer integrated content that can be used in its entirety or as a resource from which to extract a wide variety of teaching materials to enrich existing curriculum. The projects are designed for use in both technical and academic courses. Where necessary, technical background material is provided for math and science instructors along with implementation options for these two academic areas. Some projects highlight math concepts, others highlight science concepts, and some feature both math and science concepts in addition to the technical content presented.

Teachers' Domain
http://www.teachersdomain.org/

Teachers' Domain is an online library of more than 1,000 free media resources from the best in public television. These classroom resources, featuring media from NOVA, Frontline, Design Squad, American Experience, and other public broadcasting and content partners, are easy to use and correlate to state and national standards. Teachers' Domain resources include video and audio segments, Flash inter-actives, images, documents, lesson plans for teachers, and student-oriented activities.

Job Interview Lesson Plans
http://www.thirteen.org/edonline/adulted/lessons/lesson11.html

This website is sponsored by Thirteen Ed Online, public television's web service for teachers. It features everything from standards-based lesson plans and classroom activities to a multimedia primer, online mentors, and reviews of curriculum-based web sites.

O*NET OnLine

A proud partner of the americanjobcenter network

Occupation Quick Search:

Bright Outlook

Summary Report for:
37-3011.00 - Landscaping and Groundskeeping Workers

Landscape or maintain grounds of property using hand or power tools or equipment. Workers typically perform a variety of tasks, which may include any combination of the following: sod laying, mowing, trimming, planting, watering, fertilizing, digging, raking, sprinkler installation, and installation of mortarless segmental concrete masonry wall units.

Sample of reported job titles: Groundskeeper, Groundsman, Outside Maintenance Worker, Gardener, Greenskeeper, Grounds Worker, Grounds/Maintenance Specialist, Utility Worker, Grounds Maintenance Worker, Grounds Supervisor

View report: | Summary | Details | Custom

Tasks | Tools & Technology | Knowledge | Skills | Abilities | Work Activities | Work Context | Job Zone | Education | Interests | Work Styles | Work Values | Related Occupations | Wages & Employment | Job Openings | Additional Information

Tasks

- Operate vehicles and powered equipment, such as mowers, tractors, twin-axle vehicles, snow blowers, chain saws, electric clippers, sod cutters, and pruning saws.
- Mow or edge lawns, using power mowers or edgers.
- Shovel snow from walks, driveways, or parking lots and spread salt in those areas.
- Care for established lawns by mulching, aerating, weeding, grubbing, removing thatch, or trimming or edging around flower beds, walks, or walls.
- Use hand tools, such as shovels, rakes, pruning saws, saws, hedge or brush trimmers, or axes.
- Prune or trim trees, shrubs, or hedges, using shears, pruners, or chain saws.
- Gather and remove litter.
- Maintain or repair tools, equipment, or structures, such as buildings, greenhouses, fences, or benches, using hand or power tools.

- Mix and spray or spread fertilizers, herbicides, or insecticides onto grass, shrubs, or trees, using hand or automatic sprayers or spreaders.
- Provide proper upkeep of sidewalks, driveways, parking lots, fountains, planters, burial sites, or other grounds features.

back to top

Tools & Technology

Tools used in this occupation:

Cultivators — Soil pulverizers; Tillers

Draglines — Drag brooms; Drag leveling bars; Plow pan spikers; X-drags

Fertilizer spreaders or distributors — Fertilizer spreaders; Hand spreaders; Salt spreaders

Graders or land levelers — Land levelers; Land planes; Landscape rakes; Power rakes

Lawnmowers — Hydrostatic mowers; Manual mowers; Push mowers; Riding mowers

Rakes — Arena rakes; Artificial turf groomers; Iron rakes; Turf sweepers

Shovels — Dirt shovels; Snow shovels; Sod lifters

Technology used in this occupation:

Electronic mail software — IBM Lotus Notes

Operating system software — Microsoft Windows

Word processing software — Microsoft Word

back to top

Knowledge

Mechanical — Knowledge of machines and tools, including their designs, uses, repair, and maintenance.

back to top

Skills

Operation and Control — Controlling operations of equipment or systems.

Active Listening — Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

Critical Thinking — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Speaking — Talking to others to convey information effectively.

back to top

Abilities

Arm-Hand Steadiness — The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.

Multilimb Coordination — The ability to coordinate two or more limbs (for example, two arms, two legs, or one leg and one arm) while sitting, standing, or lying down. It does not involve performing the activities while the whole body is in motion.

Control Precision — The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.

Manual Dexterity — The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.

Near Vision — The ability to see details at close range (within a few feet of the observer).

Oral Comprehension — The ability to listen to and understand information and ideas presented through spoken words and sentences.

Static Strength — The ability to exert maximum muscle force to lift, push, pull, or carry objects.

Extent Flexibility — The ability to bend, stretch, twist, or reach with your body, arms, and/or legs.

Speech Recognition — The ability to identify and understand the speech of another person.

Oral Expression — The ability to communicate information and ideas in speaking so others will understand.

back to top

Work Activities

Performing General Physical Activities — Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing,

lifting, balancing, walking, stooping, and handling of materials.

Controlling Machines and Processes — Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).

Inspecting Equipment, Structures, or Material — Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.

Operating Vehicles, Mechanized Devices, or Equipment — Running, maneuvering, navigating, or driving vehicles or mechanized equipment, such as forklifts, passenger vehicles, aircraft, or water craft.

Handling and Moving Objects — Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.

Getting Information — Observing, receiving, and otherwise obtaining information from all relevant sources.

Identifying Objects, Actions, and Events — Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.

Making Decisions and Solving Problems — Analyzing information and evaluating results to choose the best solution and solve problems.

Organizing, Planning, and Prioritizing Work — Developing specific goals and plans to prioritize, organize, and accomplish your work.

Repairing and Maintaining Mechanical Equipment — Servicing, repairing, adjusting, and testing machines, devices, moving parts, and equipment that operate primarily on the basis of mechanical (not electronic) principles.

Work Context

Outdoors, Exposed to Weather — How often does this job require working outdoors, exposed to all weather conditions?

Wear Common Protective or Safety Equipment such as Safety Shoes, Glasses, Gloves, Hearing Protection, Hard Hats, or Life Jackets — How much does this job require wearing common protective or safety equipment such as safety shoes, glasses, gloves, hard hats or life jackets?

Face-to-Face Discussions — How often do you have to have face-to-face discussions with individuals or teams in this job?

Exposed to Contaminants — How often does this job require working exposed to contaminants (such as pollutants, gases, dust or odors)?

Spend Time Using Your Hands to Handle, Control, or Feel Objects, Tools, or

Controls — How much does this job require using your hands to handle, control, or feel objects, tools or controls?

Very Hot or Cold Temperatures — How often does this job require working in very hot (above 90 F degrees) or very cold (below 32 F degrees) temperatures?

Sounds, Noise Levels Are Distracting or Uncomfortable — How often does this job require working exposed to sounds and noise levels that are distracting or uncomfortable?

In an Open Vehicle or Equipment — How often does this job require working in an open vehicle or equipment (e.g., tractor)?

Spend Time Standing — How much does this job require standing?

Exposed to Minor Burns, Cuts, Bites, or Stings — How often does this job require exposure to minor burns, cuts, bites, or stings?

back to top

Job Zone

Title	Job Zone One: Little or No Preparation Needed
Education	Some of these occupations may require a high school diploma or GED certificate.
Related Experience	Little or no previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a waiter or waitress even if he/she has never worked before.
Job Training	Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.
Job Zone Examples	These occupations involve following instructions and helping others. Examples include taxi drivers, amusement and recreation attendants, counter and rental clerks, construction laborers, continuous mining machine operators, and waiters/waitresses.
SVP Range	(Below 4.0)

There are 4 recognized apprenticeable specialties associated with this occupation:
Landscape Gardener; Landscape Technician; Landscape Management Technician; Greenskeeper II

To learn about specific apprenticeship opportunities, please consult the U.S. Department of Labor State Apprenticeship Information website.

For general information about apprenticeships, training, and partnerships with business, visit the U.S. Department of Labor Office of Apprenticeship website.

Education

Percentage of Respondents	Education Level Required
52	Less than high school diploma
26	High school diploma or equivalent
16	Some college, no degree

Interests

Interest code: **RC**

Realistic — Realistic occupations frequently involve work activities that include practical, hands-on problems and solutions. They often deal with plants, animals, and real-world materials like wood, tools, and machinery. Many of the occupations require working outside, and do not involve a lot of paperwork or working closely with others.

Conventional — Conventional occupations frequently involve following set procedures and routines. These occupations can include working with data and details more than with ideas. Usually there is a clear line of authority to follow.

Work Styles

Dependability — Job requires being reliable, responsible, and dependable, and fulfilling obligations.

Independence — Job requires developing one's own ways of doing things, guiding oneself with little or no supervision, and depending on oneself to get things done.

Attention to Detail — Job requires being careful about detail and thorough in completing work tasks.

Cooperation — Job requires being pleasant with others on the job and displaying a good-natured, cooperative attitude.

Concern for Others — Job requires being sensitive to others' needs and feelings and

being understanding and helpful on the job.

Initiative — Job requires a willingness to take on responsibilities and challenges.

Self Control — Job requires maintaining composure, keeping emotions in check, controlling anger, and avoiding aggressive behavior, even in very difficult situations.

Persistence — Job requires persistence in the face of obstacles.

Innovation — Job requires creativity and alternative thinking to develop new ideas for and answers to work-related problems.

Integrity — Job requires being honest and ethical.

back to top

Work Values

Relationships — Occupations that satisfy this work value allow employees to provide service to others and work with co-workers in a friendly non-competitive environment. Corresponding needs are Co-workers, Moral Values and Social Service.

Working Conditions — Occupations that satisfy this work value offer job security and good working conditions. Corresponding needs are Activity, Compensation, Independence, Security, Variety and Working Conditions.

Support — Occupations that satisfy this work value offer supportive management that stands behind employees. Corresponding needs are Company Policies, Supervision: Human Relations and Supervision: Technical.

back to top

Related Occupations

37-2011.00   Janitors and Cleaners, Except Maids and Housekeeping Cleaners ☼

45-2092.01   Nursery Workers

45-2093.00   Farmworkers, Farm, Ranch, and Aquacultural Animals

45-4022.00   Logging Equipment Operators

47-2061.00   Construction Laborers   ☼Bright Outlook   🍃Green

47-2151.00   Pipelayers

47-4031.00   Fence Erectors

47-5051.00   Rock Splitters, Quarry

49-3093.00   Tire Repairers and Changers

51-9198.00   Helpers--Production Workers

Wages & Employment Trends

National

Median wages (2012)	$11.33 hourly, $23,570 annual
Employment (2010)	1,152,000 employees
Projected growth (2010-2020)	▪▪▪▪ Faster than average (20% to 28%)
Projected job openings (2010-2020)	444,400
Top industries (2010)	Administrative and Support Services Self-Employed

State & National

| Select a State ▼ | Go |

careeronestop
PATHWAYS TO CAREER SUCCESS

Source: Bureau of Labor Statistics 2012 wage data and 2010-2020 employment projections. "Projected growth" represents the estimated change in total employment over the projections period (2010-2020). "Projected job openings" represent openings due to growth and replacement.

Job Openings on the Web

Find Jobs
for Landscaping and Groundskeeping Workers

| Select a State ▼ | Go |

mySkills myFuture

State & National Job Banks

| Select a State ▼ | Go |

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Sources of Additional Information

Disclaimer: Sources are listed to provide additional information on related jobs, specialties, and/or industries. Links to non-DOL Internet sites are provided for your convenience and do not constitute an endorsement.

Career Infused Instructional Map

Time Period this Instructional Map covers: (e.g., # of weeks/days)	Class Structure: (check applicable items) ☐ Open entry ☐ Managed enrollment	NRS Levels : (check applicable items) TIER 1: ABE 1 2 3 ESL 1 2 3 4 5 TIER 2: ABE 4 ASE 5 6 ESL 6
INSTRUCTIONAL STRANDS		
What academic skills will the students know and be able to do? (CCR Standards)	What employability skills will the students learn? (e.g., teamwork, problem solving, customer service, communication, etc.)	What occupational context will be used to contextualize instruction? (*Integrating Career Awareness* and/or specific career cluster or occupation)
Theme -		

List the primary learning activities and indicate which of the three instructional strands will be integrated into each.		List the assessment activities that will demonstrate that students understand and can apply new information?
☐ Academic ☐Employability ☐Occupation	☐ Academic ☐Employability ☐Occupation	
☐ Academic ☐Employability ☐Occupation	☐ Academic ☐Employability ☐Occupation	
Resources/Materials I Will Need:		

List the primary learning activities and indicate which of the three instructional strands will be integrated into each. NOTE: Some of these learning activities will be preceded by explicit instruction related to the CCR Standards.		List the assessment activities that will demonstrate that students understand and can apply new information?
X □ Academic X□Employability X□Occupation **1 Career Exploration:** Introduce health-related careers by showing a video on various occupations. Ask students to select two occupations that interested them the most. Group students with identical occupational preferences. Demonstrate to the students how to find information on ONET and have groups read additional information on their selected occupations. Ask them to write down information on training requirements, salary, and job tasks – either in narrative form or graphically on a poster board. Ask them to share what they learned with the class.	X□ Academic □Employability □Occupation **2 Planning a Budget:** Ask students to share ways in which they use decimals in everyday life (money, car's odometer, gas pump, etc.) Demonstrate the concept of adding decimals by using one of their examples. Allow students to practice the concept. Provide students with a budget worksheet that lists typical monthly expenditures (housing, utilities, food, clothing, transportation, entertainment, savings, etc.). Help students to determine what they are currently spending (or would be spending if they were living on their own) for each of the items. Be sure to use standard dollars and cents nomenclature such as $60.25, $100.00, etc. Have the students add all of their items together for a monthly budget. Then have students determine how much they would need for an entire year.	1. **Career exploration:** Class presentation on training requirements, salary, and job tasks of selected occupations 2. **Planning a Budget:** Satisfactory completion of monthly budget and annual projection. 3. **Matching Budget to Occupation:** Satisfactory completion of budget worksheet showing differences between expenditures and salary. 4. **Writing for Purpose and Audience:** Based on a developed rubric, satisfactory completion of graphic organizer and one page narrative describing ways to live within a budget.
X□ Academic □Employability X□Occupation 3. **Matching Budget to Occupations:** Demonstrate the concept of subtracting decimals. Allow students to practice the concept. Using the completed budget worksheets, have the students compare their annual budget to the annual salary for their selected health-related occupations. Have them calculate the difference by	X□ Academic X□Employability □Occupation 4. **Writing for Purpose and Audience:** Demonstrate a graphic organizer to show how it can be used to organize ideas. Include sections on the organizer for purpose and audience and discuss how writing might differ depending on various audiences/purposes. Divide the class into groups and allow them to share the results of their budget activity with each other. Collectively, ask them to	

List the primary learning activities and indicate which of the three instructional strands will be integrated into each. NOTE: Some of these learning activities will be preceded by explicit instruction related to the CCR Standards.		List the assessment activities that will demonstrate that students understand and can apply new information?
subtracting the two to determine if they will have money left over or if they will need an occupation with a higher salary. Use a prepared worksheet to help them make their calculations.	brainstorm what options each of them might have in either reducing their monthly expenditures, looking for another occupation with a higher salary, or other ideas on making ends meet. While they are brainstorming, direct them to jot down ideas they gain from the discussion on ways to live within a budget on the brainstorming chart. Students will then complete the writing assessment.	

Resources/Materials I Will Need:
- **Computers and internet access**
- **Health careers video**
- **Budget worksheet**
- **Salary calculation worksheet**
- **Sample graphic organizer**
- **Writing rubric**

Math for Welders

MAR 29, 2012   by BAKERSGAS   in LEARN

Bg-equations I don't know about you, but I'm terrible at math.

Not so much computational math – that good ole reading writing and **arithmetic** type of math. But when it comes to angles and proofs and theorems and all that X = Y jazz, I'm totally lost! I made it through four years of high school math, but nearly jumped off a bridge as a result of slogging away at Trigonometry and Pre-Calculus in my senior year.

Math, however, contrary to all those bold proclamations from a seemingly endless train of high school students, is really quite important in many skilled trades, particularly welding.

What (and how much) Math do You Need as a Welder?

If you're a serious welding student with aspirations of working a professional welding trade, the reality is you need math knowledge and skills, and the more, the better.

The Basics – Fractions and Decimals

A variety of basic welding applications, whether you're working in construction or fabrication, require a rudimentary   Math test (Medium) understanding of measurements to accurately size, cut and fit metal and other materials. And measurements are all based on computational fractions, which may also, in certain situations, need to be converted to decimals.
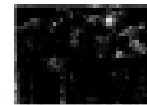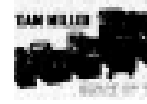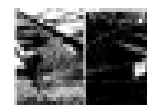
probably be called upon to do quite frequently, working in both construction and fabrication, requires a general knowledge of fractions and decimals in order to understand how measurements breakdown and apply to the structures or item you're building.

Geometry

Several basic tenets of geometry, including understanding, calculating and measuring angels, measuring and calculating area and volume of a variety of shapes, and calculating radius (distance from the center of a circle to one side), diameter (distance from one side of a circle across to the other) and circumference (distance around the outside of a circle) of round or circular objects are all important skills for any welder.

Obviously forming joints is a huge part of welding, and joints form angles, and angles are prime time in geometry.

The American Welding Society (AWS) **offers a highly informative power point presentation on the importance of geometry and calculating angles in the joint welding process.**

Understanding how to use drafting tools like angles (usually clear plastic triangular shaped instruments, 90 & 60 degree angles being the most common) and a compass are both helpful when constructing joints to help make sure they're square, and determining the radius, diameter and circumference of a circle.

Trigonometry

While we're getting up into some pretty high math when it comes to Trigonometry, many welders agree that at least a basic understanding of trig, including sine, cosine and tangent, is an invaluable tool when it comes to problem solving, particularly in calculating angles and the length of each side in a particular shape you're trying to replicate.

Additionally, calculating volume and area, calculating degrees and understanding formulas are all important skills for welders, which happen to be rooted in trigonometry.

Volume and Area

Calculating area and volume area are components of both geometry and trigonometry.

Important welding related calculations inlcude:

- Calculating weld volume – Area of Segment (weld reinforcement) which defines the rounded "reinforcing" cap placed on a join weld

- Calculating pounds of steel required to effectively reinforce a joint

- Estimating the materials required for a project

- Determining the volume of materials able to fit in a given size area

Formulas

A basic understanding of formulas is important for solving geometric equations necessary to replicate certain shapes, in addition to calculating volume and reading formulas related to welding gases — a seasoned welder can easily determine the effect of temperature changes relative to changes in pressure based on a formula.

A Calculator is a Great Tool, Except When it's Not

A calculator is undoubtedly an important tool for welders, but what if you're out in the field doing repairs or on a construction site and you don't have a calculator handy?

Learning to write out long form computations and equations is an invaluable skill that will not only help you when your calculator is out of reach, but also provides a better illustration of a particular scenario or problem you're trying to work through. When your seemingly annoying high school math demanded you "show your work," it's not because they wanted to be annoying (well maybe not…?), it's because they wanted you to have the ability to work through a particular problem so you could apply the same process in the future.

Additional Resources

There are a number of excellent books and online resources which can help you bone up on your welding related math skills. A few choice examples include:

- **Math to Build On**

- **Math for Welders**

- **Welding Web**

- **Net Welding**

Tagged with: angles, area, calculations, decimals, equations, formulas, fractions, geometry,

Math Beyond School

The Police

Natasha Glydon

Do you ever wonder how officials decide who is at fault in an accident when there are no witnesses? The answer is math. The Royal Canadian Mounted Police (RCMP) use math in many ways, not only while analyzing accidents, but also while on patrol. Math is used in forensics as well and members of the RCMP work with engineers and other specialists to find clues at a crime scene. Then, they can use problem-solving skills to draw up a variety of possibilities. As more clues unfold, they can eliminate possibilities, coming to a final conclusion that can be used as evidence in court.

Accident Reconstruction

One of the specialty areas of the RCMP is accident reconstruction. These people analyze traffic accidents to determine the cause of an accident and the causes of any injuries that people sustained. It is also their job to decide whether or not the accident was preventable. To do this, they need to have a very acute sense of mathematics.

Frequently, when a collision accident happens, there are skid marks left on the roadway from a vehicle that has locked its breaks. Specialists measure the skid marks and apply the measurement to a formula that enables them to find the speed of the vehicle, prior to the collision. The formula that the accident re-constructionists use is:

$$S = 15.9\sqrt{df}$$

S is the speed of the vehicle, d is the distance of the skid marks, and f is the coefficient of friction. Measuring the distance of skid marks is a fairly routine procedure and can be done relatively easily, but it is a little more difficult to find the coefficient of friction.
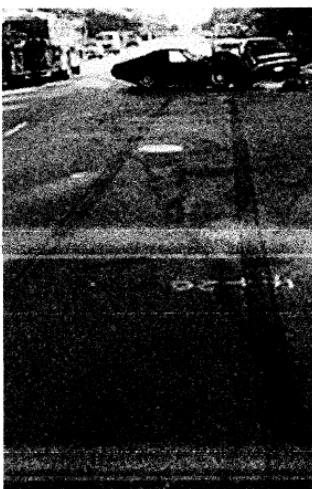

Image reproduced with
permission of Surrey RCMP

The coefficient of friction is the amount of friction (force) acting on the tires, and is influenced by the weight of the vehicle, the roadway surface (asphalt,

gravel, etc.) and weather conditions (rain or ice). The coefficient of friction is measured as a force and can be found using the formula:

$$f = \frac{F}{W}$$

The f is the measurement of force (the coefficient of friction), the F is the force of gravity coming down on the tires, and W is the weight of the tire. In order to find the force of gravity (sometimes referred to as the drag factor), specialists actually drag one of the weighed tires along the roadway to determine the force. They will drag the tire maybe twenty times and take the average force measurement. To actually find the measurement of the drag factor requires a number of complex formulas and some special equipment.

In order to use this formula for measuring skid marks, the skids have to be in straight lines.

Sometimes, vehicles will skid in a circular motion. These marks are called yaw marks. Yaw marks occur when tires rotate and spin. In order to find the speed the vehicle was traveling before it started to skid, accident re-constructionists use another formula:

$$S = 15.9 \sqrt{\left(\frac{R \bullet (f \pm e)}{2} \right)}$$

S is the speed of the vehicle before impact, f is the coefficient of friction, e is the elevation of the road, and R is the radius of the yaw mark. The radius is determined by finding the centre of mass of one of the tires, which acts as the centre of the circle. This formula, one of many more complex formulas involved in this problem, utilizes the understanding of linear momentum as the vehicle spins out of control.

Image reproduced with permission of Surrey RCMP

Because of the Law of Conservation of Momentum, energy is neither created nor destroyed. Thus, if specialists know the angles that the incoming vehicles collided at and the weight of the vehicles, they can determine the speeds of the vehicles.

Equations are also used to find speeds of vehicles using other information, aside from skid and yaw marks. If a pedestrian is hit, or a vehicle rolls, speeds can be determined by analyzing the movement of the pedestrian and vehicle. If a vehicle or pedestrian vaults, flips, or falls, these differences can help determine the speed of the traveling vehicle. Again, specialists use a number of complicated equations to find an exact speed. After an accident happens, officials can use math to decide who was driving the vehicle, even if the driver was not wearing a seatbelt, by looking at where the victims landed and then measuring and figuring out angles. There is only one solution.

This uniqueness also applies to crime scene investigation. Sometimes, RCMP officers and other specialist will need to analyze fingerprints or shoe prints. DNA is not as effective because identical twins have the same DNA, but different fingerprints. When experts analyze fingerprints, they are looking for patterns. They look for particular ridges and use special tools to find tiny edges or pores on a ridge of a fingerprint. Similarly with shoeprints, specialists want to find what makes a particular shoe print unique. Maybe there is a break in the sole pattern that makes that specific shoeprint different from any other shoeprint from a similar shoe. In math we recognize uniqueness as a single solution. There is only *one unique* solution. This is similar to working with fingerprints. When analyzing a set of fingerprints, they either match, or they don't.

Math on Patrol

RCMP officers also use math while on patrol. The legal drinking limit for an adult that is still able to drive is a blood alcohol content (BAC) of .08. That is, any measurement higher than that makes driving illegal, and drivers can be charged or fined. The measurement of .08 means .08 grams of alcohol per 100mL of blood. The mouth absorbs alcohol, so the alcohol on the driver's breath is related to the amount of alcohol in their blood. The ratio of breath alcohol to blood alcohol is 2100 to 1 (this ratio can vary slightly depending on the individual). This means that the alcohol content of 2100 milliliters of exhaled air is the same as the amount of alcohol in 1 milliliter of blood. Alcohol is then expressed as a percentage amount in the blood, where the legal limit is .08%. RCMP officers use a breath test called a Breathalyzer to determine the BAC of a driver they suspect may have been drinking. And although the Breathalyzer does most of the math, it is important to understand how it works and the math behind it.

RCMP officers also use math when writing tickets. Let's look at speeding tickets as an example. In the province of Saskatchewan, speeding tickets can be expressed as linear equations. That is, the faster a person drives (in excess of the posted speed limit), the more their ticket will be if they get caught. If the vehicle is traveling 0 – 30 km/h over the posted limit, the fine is $70 plus $1 for every km/h over the limit. There is also a Victim Surcharge of $30 if the total cost of the ticket is less than $100. So, let's say the posted limit is 110 km/h and a vehicle is traveling 125 km/h. If the driver were to get caught, finding the cost of the ticket would require some mathematical calculations. First of all, 125 km/h is 15km/h over the limit. The base ticket rate is $70, plus $1 for each km/h over ($15). This brings the total amount of the ticket to $85. Since this is less than $100, the Victim Surcharge would be applied, summing up the total fine to $115.

RCMP officers need to do this math quickly, while the driver waits patiently in their car. They also need to be very accurate. The above rate is not the only rate officers need to know. If a vehicle is traveling 31 – 50 km/h over the limit, the fine is $70 plus $2 for every km/h over the posted limit. There is also a $40 Victim Surcharge, regardless of the total amount of the ticket. If a vehicle is traveling 51+ km/h over the speed limit, then the fine is $140 plus $4 for every km/h over the limit. There is also a Victim Surcharge of $40 (if the ticket is less than $200) or $50 (if the ticket is more than $200).

RCMP officials use math everyday. They use many complex equations and do a lot of problem solving. The equations discussed previously may not seem that difficult, but they are used in conjunction with a number of other complex and advanced formulas. It is important for the Police officers to know which formula is used for what and how to apply them, as well as to figure out values for the variables. Police officers are trained to use mathematics in their field and can take extended training to work in Forensics or Accident Reconstruction.

The television program NUMB3RS exemplifies more math in crime scene investigation. There are acitivities to follow that coincincide with episodes of

the show. Visit the <u>website</u> for more details.

For more information, you may want to ask your local RCMP detachment.

Special thank you to
Corporal Bob Findlay of the Morse RCMP Detachment, who is a Level 4
Accident Reconstructionist, for all of his help and expertise. Also, thank you
to Dave Chu of the Surrey RCMP for his help.

Employability Skills Framework

http://cte.ed.go/employabilityskills/

The Employability Skills Framework is an initiative of the Office of Vocational and Adult Education, U.S. Department of Education. Its purpose is to consolidate and disseminate information on employability skills to form a centralized clearinghouse that helps inform the instruction and assessment of these skills. Information on this site, compiled from a variety of sources, represents a common understanding of employability skills supported throughout the U.S. government.

Preparing Workers for the 21st Century

https://llmcl422.weebly.com/soft-skills.html

The *Preparing Workers* curriculum developed by the Michigan Department of Labor and Economic Growth, Office of Adult Education, contextualizes employability skills with EFF competencies in math and reading. Adult students who read at the fourth grade level or higher will have little difficulty comprehending the content of the reading selections.

North Carolina Employability Skills Tool Kit

http://www.nc-net.info/employability.php

To support instructors as they seek to enhance how their courses address the eight competencies, NC-NET developed a **Resource Toolkit** comprised of eight modules. Each module contains instructional materials including activities, student handouts, assessment rubrics, and annotated presentation slides.

1. Interpersonal Skills and Teamwork
2. Communications
3. Integrity and Professionalism
4. Problem Solving and Decision Making
5. Initiative and Dependability
6. Information Processing
7. Adaptability and Lifelong Learning
8. Entrepreneurship

Competency Model Clearinghouse
http://www.careeronestop.org/competencymodel/pyramid.aspx

The Competency Model Clearinghouse includes a broad range of employability skills within the model's personal effectiveness and workplace competencies.

Bridging the Employment Gap: Ready for Work
http://www.nald.ca/library/learning/gap/ready/pdf/ready.pdf

Ready for Work focuses on "soft skills" needed by all employees. Ready for Work was developed in response to requests from employment counselors and job developers.

National Career Development Guidelines (NCDG) Framework
http://associationdatabase.com/aws/NCDA/asset_manager/get_file/3384/ncdguidelines2007.pdf

The guidelines are organized around a framework of three domains including: Personal Social Development, Educational Achievement and Lifelong Learning, and Career Management. The framework and its associated goals offer a continuum of skills for young people and adults that should help them develop skills necessary to get the most from education life and work. Though the guidelines are not associated with particular grade levels, most of the supporting activities are geared to high school and middle school students. Use these guidelines to identify activities and strategies for developing high-quality career programs.

Employability Skills
http://www.myfuture.edu.au/The%20Facts/Skills/Employability%20skills.aspx

myfuture is Australia's career information and exploration service with thousands of resources to plan career journeys. It offers a striking similarity to employability skills identified in the United States.

What Do Employers Want?
https://www.forbes.com/sites/susanadams/2013/10/11/the-10-skills-employers-most-want-in-20-something-employees/#7c12bb156330

SCANS **Secretaries Commission on Achieving Necessary Skills**

http://wdr.doleta.gov/SCANS/whatwork/

The Secretary's Commission on Achieving Necessary Skills (SCANS) (originally done in 1991 and updated in 2000) was asked to examine the demands of the workplace and whether today's young people are capable of meeting those demands. Specifically, the Commission was directed to advise the Secretary on the level of skills required to enter employment. In carrying out this charge, the Commission was asked to:

- Define the skills needed for employment;
- Propose acceptable levels of proficiency;
- Suggest effective ways to assess proficiency; and
- Develop a dissemination strategy for the nation's schools, businesses, and homes.

EMPLOYABILITY SKILLS FRAMEWORK

Employability Skills: A Crucial Component of College and Career Readiness
Individuals require many skills to be college and career ready, including academic knowledge, technical expertise, and a set of general, cross-cutting abilities called "**employability skills.**"

Applied Academic Skills
- Uses reading skills
- Uses writing skills
- Uses mathematical strategies and procedures
- Uses scientific principles and procedures

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

Personal Qualities
- 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

Critical Thinking Skills
- Thinks critically
- Thinks creatively
- Makes sound decisions
- Solves problems
- Reasons
- Plans and organizes

Resource Management
- Manages time
- Manages money
- Manages materials
- Manages personnel

Information Use
- Locates information
- Organizes information
- Uses information
- Analyzes information
- Communicates Information

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

Technology Use
- Understands and uses technology

Systems Thinking
- Understands and uses systems
- Monitors systems
- Improves systems

Applied Knowledge | *Effective Relationships* | *Workplace Skills*

EMPLOYABILITY

Common Framework for Employability Skills

The Employability Skills Framework advances a unifying set of skills that cuts across the workforce development and education sectors based on an inventory of existing employability skills standards and assessments.

The Employability Skills Framework was developed as part of the Support for States Employability Standards in Career and Technical Education (CTE) and Adult Education project, an initiative of the Office of Career, Technical, and Adult Education, U.S. Department of Education. Framework development was guided by CTE, adult education, workforce development and business organizations, and twelve federal agencies.

http://cte.ed.gov/employabilityskills

"The other night they were interviewing Snoop Dogg and others and they asked them a question about what they thought about the dress code that the NBA players now had to follow. Snoop Dogg was the one who said, 'If you're not writing the check then you dress the way your boss says to dress. (In my business) I write the checks, and I can dress any way I want.' And I think that is a very key point."

David Porter, Administrator, Detroit Public Schools, MI (2006)
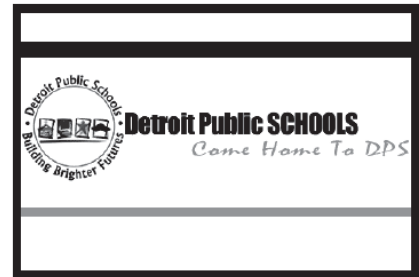
Vocabulary
Receptionist · Reputation · Professional · Appointments

Reading Selection 1.1
Alyssa – Looking Professional

Alyssa just started working as a receptionist for a law firm. The law firm has many cases each year. The firm has a good reputation for being very professional; however, the lawyers and their clients are a little old-fashioned.

Alyssa is a smart young woman. She has a great voice on the phone. She makes people feel comfortable. She is very good at setting up appointments. She always makes sure that phone messages are correct.

Alyssa rides motorcycles on the weekends. Her friends have been trying to talk her into getting a tattoo and piercing her eyebrow. Alyssa likes the idea and is thinking about it. She thinks tattoos are really cool.

Alyssa told her friend Nancy that she was thinking about getting a tattoo and piercing her eyebrow. Nancy told her to think about how it might affect her job. Alyssa loves her job and hopes to stay with the firm. She is going to school at night studying to be a legal assistant.

EFF Work Readiness Profile Tasks
Acquire, use, and share information accurately and in a timely manner in order to respond to requests from internal and external customers.

Self Management: display responsible behaviors at work (maintain appropriate grooming and hygiene).

1.1 Acquire and Use Information

Think About It and Discuss!

1. What should Alyssa do? Why? State the likely result of each choice.
   a. Get the tattoo and body-piercing. It's her body and her business.
   b. Get the tattoo, but forget the body-piercing. She can cover up the tattoo.
   c. Forget about both.
   d. Ask her boss what he thinks.
   e. Other ideas:

Write About It!

Pretend that you are Alyssa. Think about how you would approach your boss about his/her opinion on the appropriateness of tattoos and facial piercings in the workplace. Write a short email to the law firm's boss, asking for his/her opinion regarding an employee having visible tattoos and facial piercings in the workplace. Make sure to use complete sentences and formal language when writing your email.

Skills
to Pay the Bills

Mastering Soft Skills for Workplace Success

2. Flipping the Switch

JUST THE FACTS: The purpose of this activity is to encourage youth to discuss the different types of communication they might use in different situations and environments. It introduces the idea that language/communication varies by context – and that it's important to understand what might be acceptable and expected in one setting may not be appropriate in another.

Time
30 Minutes

Materials
- Activity 2
- Optional: Flip chart/markers

Directions
Ask participants to describe or demonstrate how they communicate with their friends. Then ask how they communicate with family members. Finally, ask how they are likely to communicate with an employer at a job interview.

Discuss the differences and similarities in the participants' responses. Ask the group:
- Why is each situation different?
- What are the expectations of each person?
- What would happen if you greeted your friends in the way you greeted an interviewer?
- What would happen if you greeted an interviewer the same way you greet your friends?

Knowing how to communicate with people in the right context for a given situation is an important skill, as there are often unspoken rules and standards that are just expected. For example, it's common practice in the professional world to shake hands with people when meeting, rather than offering a high-five or a hug. We might use slang with our friends when talking about what happened at school or at a party, but we would usually use different words and mannerisms when telling our parents the same information.

Use Activity 2 to compare and contrast the differences in how we might share the same type of information to different groups.

23

Conclusion

Discuss the following ideas with participants, encouraging an honest dialogue:

1. When the group changes, does the message change? Why or why not?
2. What are some examples of communication (both verbal and non-verbal) that you should always try to practice when communicating with an employer? How would your friends react to you if you communicated with them in the same way you would to an employer?

Journaling Activity

We all communicate differently with different people in our lives. Does the way you communicate (or say things) affect how others perceive you? Explain.

Extension Activity

We build great relationships by learning to become great communicators. This is not always an easy task as we sometimes may experience barriers to communication - especially in the workplace. Take some time to explore with the group the following eight barriers. Think about what they are and ways in which these barriers can be lessened or eliminated for successful communication. The facilitator may wish to emphasize the importance of non-verbal communication skills, as young people often overlook these skills.

- Physical
- Perceptual
- Emotional
- Cultural

- Language
- Gender
- Interpersonal
- Generational

24

Activity 2. Flipping the Switch

Consider the following situations. Create a list, discuss, draw a picture, or encourage participants to act out the different ways one might communicate with each of following groups:

- FRIENDS
- FAMILY
- PROFESSIONAL (INTERVIEWER, EMPLOYER, TEACHER, ETC.)

Be sure to explore BOTH verbal language (what we say and how we say it, i.e., tone of voice) and non-verbal language (facial expressions, behavior, body language, etc.)

SITUATION 1: Saying hello or goodbye

Friends:

Family:

Professional:

SITUATION 2: Asking for help

Friends:

Family:

Professional:

SITUATION 3: Emailing or texting

Friends:

Family:

Professional:

SITUATION 4: Showing excitement

Friends:

Family:

Professional:

SITUATION 5: (Create your own)

Friends:

Family:

Professional:

Free Job Readiness Curriculum

Lesson Plans

Unit 1: Getting Ready

This unit focuses on career preparedness and mature attitudes toward work. It offers practical skills to prepare a resume and references. Also, it educates students on laws relating to underage employment and the importance of proper use of social media.

Students will research, read articles, view videos, write a resume and reflect upon these tasks. The unit includes an evaluation rubric for each page and concludes with a multiple choice quiz.

Pages

1. Are you ready?
2. Cultivating references
3. What jobs are appropriate for you?
4. How to write a resume
5. Know the child labor laws
6. Social Media
7. Unit 1 Quiz
8. Unit 1 Final Rubric

Unit 2: Finding & Getting the Job

This unit helps students search for potential careers and research available positions. It focuses on etiquette, manners and appearance and includes sample job applications. Also, the unit prepares students for the all-important job interview process. Students will research, read articles, prepare a sample application, view and critique videos and reflect upon these tasks. The unit includes an evaluation rubric for each page and concludes with a multiple choice quiz.

http://readyjob.org/readyjob-lesson-plans/

Employers give college graduates low scores for preparedness across learning outcomes; students think they are better prepared.

Proportions saying they/recent college graduates are well prepared in each area*

Legend: ■ Employers ■ Students

Learning Outcome	Employers	Students
Working with others in teams	37%	64%
Staying current on technologies	37%	46%
Ethical judgment and decisionmaking	30%	62%
Locating, organizing, evaluating information	29%	64%
Oral communication	28%	62%
Working with numbers/statistics	28%	55%
Written communication	27%	65%
Critical/analytical thinking	26%	66%
Being innovative/creative	25%	57%
Analyzing/solving complex problems	24%	59%
Applying knowledge/skills to real world	23%	59%
Awareness/experience of diverse cultures in US	21%	48%
Staying current on developments in science	21%	44%
Working with people from diff. backgrounds	18%	55%
Staying current on global developments	18%	42%
Proficient in other language	16%	34%
Awareness/experience of diverse cultures outside US	15%	42%

*8-10 ratings on zero-to-ten scale

Work-Based Learning Framework

https://www.jff.org/resources/work-based-learning-framework/

This framework helps to define work-based learning and looks beyond the classroom to expand academic and technical learning and accelerate advancement along career pathways. Work-based learning is defined as a student or worker completing meaningful job tasks in a workplace that develop readiness for work, knowledge, and skills that support entry or advancement in a particular career field.

Work-Based Learning System Development Guide

https://www.jff.org/resources/work-based-learning-system-development-guide/

This guide offers an assessment process and tools to assess and support the development of a work-based learning system – drawing on the analysis of three California school districts.

Making Work-Based Learning Work

https://www.jff.org/resources/making-work-based-learning-work/

Jobs for the Future has identified seven principles that support youth and adults seeking to enter and advance in careers. Together, these principles encourage the design of work-based learning models that increase access to work-based learning for all, provide participants with key training and work experience, and help employers meet their needs for a skilled workforce.

Work-Based Learning in Action

https://www.jff.org/resources/work-based-learning-action/

Work-Based Learning in Action is a series of case studies highlighting effective models of work-based learning.

Work-Based Courses Toolkit

https://www.jff.org/resources/work-based-courses-bringing-college-production-line/

This toolkit provides guidance to community college administrators and faculty who are interested in bringing work-based learning models to their college.

The Work-Based Learning Self-Assessment Tool

https://www.jff.org/resources/work-based-learning-self-assessment-tool/

This tool is designed to help education and employer partners determine how well they have implemented work-based learning. The tool also suggests steps for strengthening current practices.

College and Career Navigator Trainer Manual

http://www.collegetransition.org/wp-content/uploads/2017/10/NavigatorManual-July2015.pdf

The target audience for the training activities outlined in this Trainer Manual are College and Career Navigators, transition counselors, success coaches, or anyone whose primarily function (regardless of exact job title) includes providing direct students support and guidance, as well as coordinating campus and community support services.

Navigator Manual

https://www.cccs.edu/wp-content/uploads/documents/NavManual.pdf
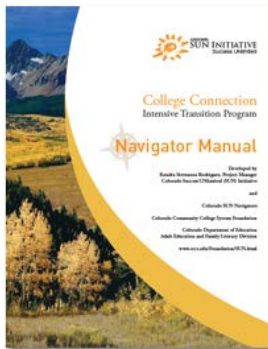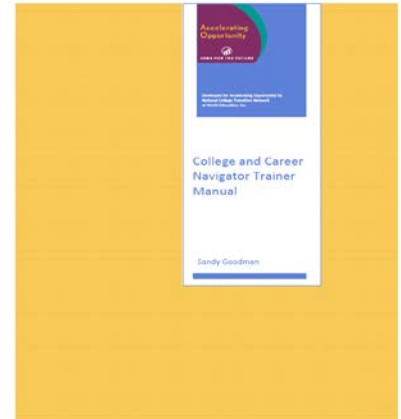
This manual, developed by the Colorado Community College System, is designed to help navigators/advisors carry out duties related to recruiting / marketing, one-on-one case management, self-advocacy, college process assistance, academic advising, financial aid assistance, career exploration and planning, motivation and retention, supervision of student ambassadors, and college persistence support.

Texas Counseling to Careers Toolkit

http://sabes.org/sites/sabes.org/files/resources/Texas%20Counseling%20to%20Careers%20Toolkit%20.pdf

This Toolkit was commissioned by Texas LEARNS to make the Counseling to Careers intensive training materials and tools, developed by Jobs for the Future (JFF), available to all adult education programs throughout Texas. The CTC process is about identifying a range of best bet occupations and training programs that would be a good fit for a range of students. With up-to-date labor market information and interviews with local industry and training providers, adult education providers can better align program design and student guidance with real labor market opportunity. Instructors and advisors can then guide students to programs of study which align with their interests, aptitudes, and regional employment needs, leading to careers and high growth employment.
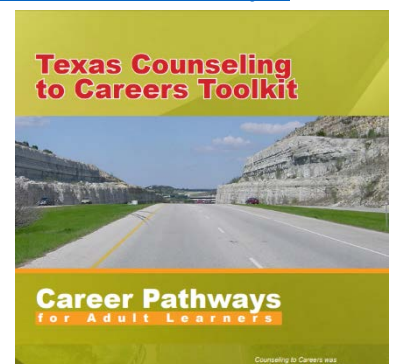
Integrated Education and Training: Model Programs for Building Career Pathways for Participants at Every Skill Level

https://www.clasp.org/sites/default/files/public/resources-and-publications/publication-1/WIOA-IET-Model-Programs.pdf

This report defines IET and provides examples of best practices from across the country.

Integrated Education and Training

https://www.calpro-online.org/onlinevideolibrary/iet.asp

This webpage features a series of 10 interviews with practitioners of Integrated Education and Training programs in California. The interviews feature a variety of administrators, instructors, program coordinators and other personnel, who address frequently asked questions about the models used to implement their IET programs.

Integrated Education and Training: A Career Pathways Policy and Practice

https://www.clasp.org/sites/default/files/public/resources-and-publications/publication-1/Integrated-Education-and-Training-A-Career-Pathways-Policy-Practice.pdf

In order to get insight into IET models, funding mechanisms, and partnerships across the country, CLASP and the Texas Workforce Commission conducted a national survey of adult education providers to learn more about IET models, funding mechanisms, and partnerships across the country. Two hundred sixty-five people from 43 states took the survey; 43 percent represented local education agencies and 34 percent institutions of higher education. Among respondents, 21 percent had not yet started IET programming, while 42 percent have been doing IET for more than two years. However, only 69 percent feel certain that their program meets all of the IET requirements. This report includes the results of the survey.

Integrated Education and Training Guide

https://lincs.ed.gov/sites/default/files/IET_checklist508FINAL_0.pdf

This guide, developed as part of the Building Opportunities through Integrated English Literacy and Civics Education project, is intended to be used as a self-assessment in your development or review of an IET program.

I-BEST

CCRC evaluated the Integrated Basic Education and Skills Training (I-BEST) program model, which is designed to speed the transition to college and careers for adult basic skills students by pairing basic skills and career–technical instructors in the classroom so that students gain basic and occupational skills simultaneously. CCRC conducted in-depth field research to examine how the model works. Quantitative analysis suggests that the program substantially increases the rate at which adult basic skills students earn college credits and complete postsecondary occupational credentials. CCRC also examined whether the positive effects of the program are worth the costs.

This study was funded by the Bill & Melinda Gates Foundation and by Ford Foundation.

DECEMBER 2012

Contextualized College Transition Strategies for Adult Basic Skills Students: Learning from Washington State's I-BEST Program Model

https://ccrc.tc.columbia.edu/publications/i-best-program-final-phase-report.html

APRIL 2011

How I-BEST Works: Findings From a Field Study of Washington State's Integrated Basic Education and Skills Training Program

https://ccrc.tc.columbia.edu/publications/how-i-best-works.html

SEPTEMBER 2010

Washington State's Integrated Basic Education and Skills Training Program (I-BEST): New Evidence of Effectiveness

https://ccrc.tc.columbia.edu/publications/i-best-new-evidence.html

MAY 2009

Educational Outcomes of I-BEST, Washington State Community and Technical College System's Integrated Basic Education and Skills Training Program: Findings from a Multivariate Analysis

https://ccrc.tc.columbia.edu/publications/i-best-multivariate-analysis.html

https://www.clasp.org/sites/default/files/public/resources-and-publications/publication-1/WIOA-IET-Model-Programs.pdf

Partnership Survey

Identifying Our Strengths
Joining Forces to Build an Adult Career Pathways System

A comprehensive and coordinated career pathways system requires a variety of shared functions by multiple partners. Listed below is a sampling of some of these functions. Indicate in which functions your agency/organization:

(1) has expertise,
(2) would be willing to participate (you or someone within your agency/organization),
(3) can legally expend funds for, and/or
(4) currently provides financial support or other resources.

Name of Organization: _____

Contact Person: _____

Email: _____

Check all that apply.

Career Pathways Functions	My agency has expertise in this area.	My agency would be willing to participate in this function.	My agency can legally expend funds.	My agency currently provides support or other resources.
Gap Analysis				
Analyze US Census and National Assessment of Adult Literacy data to determine the educational levels of adults in the region				
Conduct a systematic labor market analysis, identifying industries and fields that offer jobs with family-supporting wages and opportunities for advancement				
For each high demand occupation/job sector, identify the required educational, technical, and workplace competencies				
Conduct a gap analysis of the population's educational levels versus the requirements of the high demand occupations				
Identify educational/training providers in your region and assess the extent to which they have the capacity to bridge the gap between existing educational levels and high demand occupational requirements				
Conduct a regional funding audit to identify state, regional, community and				

Career Pathways Functions	My agency has expertise in this area.	My agency would be willing to participate in this function.	My agency can legally expend funds.	My agency currently provides support or other resources.
partner resources that can be leveraged to fill unmet education and training needs				
Develop a plan to annually update this gap analysis process				
Partnership Development and Planning				
Identify and engage potential partners, such as employers; civic and philanthropic organizations; public and private providers of education, training and social services; and economic and workforce development agencies				
Develop agreed-upon measurable goals based on the gap analysis findings				
Clearly articulate the roles, commitments, and contributions of each partner – including employers – through written memoranda of understanding				
Identify costs and develop a funding strategy including targeting existing funding sources and identifying additional revenue streams				
Build and broaden support by bringing partners together regularly to promote communication and collaboration				
Create a methodology for tracking educational and career outcomes for individuals over time				
Curriculum Development				
Create a structure for obtaining buy-in and input from Adult Education, technical, noncredit/workforce development faculty, and/or developmental education programs (e.g., program advisory team, program management team, employer engagement)				
Determine how to cover the costs for curriculum development (e.g., existing funds, special grant funds, etc.)				
Create a system of stackable certificates at non-postsecondary and postsecondary levels that allow adult learners to progress through the career ladder with tangible evidence of work readiness				

Career Pathways Functions	My agency has expertise in this area.	My agency would be willing to participate in this function.	My agency can legally expend funds.	My agency currently provides support or other resources.
Identify the "right" instructors to develop and teach the contextualized curriculum (e.g., faculty with certain characteristics, incentives for curriculum development, specialized professional development)				
Examine and recommend various workrelated assessment tools such as WorkKeys, career inventories, etc. that would support the career pathways system.				
Crosswalk state-approved adult education standardized tests with college entrance exams (e.g., COMPASS, ACCUPLACER) to determine possible gaps.				
Develop aligned curricula that integrate the skills needed for successful dual or concurrent enrollment in adult education and occupational training programs				
Integrate transferrable career readiness skills and activities such as career exploration, study skills, problem solving, computer literacy, job search, etc.				
Develop career pathways with sequential levels, each with specific entry and exit requirements, that ultimately lead to college or career certification in high demand jobs				
Where appropriate, match each level with high demand employment opportunities in the region?				
Advising/Navigating				
Implement a barrier identification process to identify and resolve barriers to student participation and success				
Utilize a navigator/case manager with specific responsibilities for helping students to understand and navigate through his/her career pathway				
Provide specialized training for your navigators so they would be informed about the services of all educational, training, and support organizations as well as the employment/employer				

Career Pathways Functions	My agency has expertise in this area.	My agency would be willing to participate in this function.	My agency can legally expend funds.	My agency currently provides support or other resources.
requirements of the high demand jobs				
Integrate one or more of these activities into the advising/navigating services: career exploration, cohorts and peer mentor, job and college exposure, computer skills through course content, etc.				
Provide job and/or college placement services for participants				
Managing and Implementing a Career Pathways System				
Develop a specific budget for the implementation of the program				
Share costs (direct and/or in-kind) across multiple providers				
Provide specialized training and support to instructors working in the career pathways system				
Develop a specialized student recruitment process to identify students interested in participation in the career pathways components				
Support interagency cross-training on topics that require a common understanding at the local and regional levels				
Design and implement branding and marketing plans to promote the benefits of the Career Pathway program to all of the partnering organizations and employers				
Utilize a specific structure to monitor the progress of the program with all partners (e.g., Project Advisory Board meetings)				
Evaluating Career Pathway Programs and Promoting Continuous Improvement				
Identify the evidence that each partner wants to collect to document success				
Use a strategy to identify the data that each partner would contribute to provide the evidence to document success				
Develop a performance management system that spans multiple years in order				

Career Pathways Functions	My agency has expertise in this area.	My agency would be willing to participate in this function.	My agency can legally expend funds.	My agency currently provides support or other resources.
to report longitudinal economic and educational impact				
Make adjustments based on evidence of program impact and effectiveness				
Identify ways to expand successful models and strategies to other industry sectors				

HOW CAREER INFUSED ARE YOU?

This self-assessment will help you determine your level of career infusion. Don't let it overwhelm you. Very few programs across the country have all of these elements in place. Instead, use the results to help you prioritize actions you would like to add or strengthen in your program.

Category/Item: PLANNING	Yes	No	Some
1. Have you identified the high demand occupations in your region?			
2. Are there training programs available at the college or close-by where students can begin to gain the skills needed to progress through a career ladder to those occupations?			
3. Have you graphically illustrated how those occupations fit into a career pathway with progressive levels of education/training and salaries?			
4. Have you engaged stakeholders (faculty, staff, students) in seeing the "why" behind the career infusion approach?			
5. Have you analyzed your student population data to determine the types of career-infused programs you need?			
6. Have you built partnerships within and outside of the college to facilitate training and student support services (i.e., occupational deans, program chairs, faculty; local WorkSource Center staff; CTE; human services; employers; etc.)?			
7. Have you determined key performance indicators up front on which you will measure success (i.e., # of college credits earned, program completers, EFL gains, attendance, employment, etc.)?			
8. Have you designed an engaging and relevant student recruitment plan to encourage enrollment and participation, including an interactive orientation and/or information session?			

Category/Item: PLANNING	Yes	No	Some
9. Do you have trained advisors/navigators who can provide support to students as they embark on their career pathways?			
10. Do you have a process for contextualizing College and Career Readiness Standards to tasks related to selected occupations and/or occupational training curriculum (i.e., faculty workgroup, lead instructor, purchase of career-related adult education textbooks)?			
11. Have you determined the costs of implementing the career-infused program and secured necessary funding and/or reallocated resources as needed?			

Category/Item: IMPLEMENTING	Yes	No	Some
Career Awareness, Exploration, and Planning			
1. Are your students made aware of what the high demand occupations are?			
2. Do students participate in career exploration activities to become familiar with how to find occupational information on the Internet and to know what type of information is helpful in comparing occupational choices?			
3. Do you help students understand the relationship between their interests, skills, values, and abilities, and how that informs educational and career options?			
4. Do you help students understand the college admissions process, financial aid and what placement tests are, how they are used, and how to prepare for them?			
5. Do students learn about the various types of postsecondary schools and institutions that provide further education and to understand the advantages and disadvantages of each?			
6. Do you help students learn how to access information from a college website?			

Category/Item: IMPLEMENTING	Yes	No	Some
7. Do you help students learn about options for paying for further education?			
Contextualized Learning	**Yes**	**No**	**Some**
8. Have the academic skills needed for high demand occupations or specific occupational training been identified?			
9. For IET, has the instructor or staff member talked with the occupational instructor, observed the occupational class, and/or reviewed the occupational textbooks to identify academic skills needed for successful completion of the training courses?			
10. Are students' career plans shared with instructors?			
11. Do instructors help students understand why they are learning what they are teaching?			
12. Do students experience learning through hands on activities that allow them to discover new knowledge?			
13. Do instructors use real life occupationally relevant materials in their teaching that reflect work-related topics and high demand occupations?			
14. Do instructors give students opportunities to apply what they have learned to real life situations?			
15. Do students regularly participate in interactive groups where they share information, make decisions, and solve problems?			
16. Do instructors use lessons and activities that encourage students to apply what they have learned to new situations including their planned futures?			
17. Is instruction offered with sufficient intensity and quality and based on the most rigorous research available?			

Category/Item: IMPLEMENTING	Yes	No	Some
Soft Skills and Workforce Preparation Skills	**Yes**	**No**	**Some**
18. Have you selected a good curriculum to integrate soft skills/workforce preparation skills into instruction (e.g., self-management, teamwork, communication, problem solving, work ethics, employer expectations, etc.)?			
19. Do students receive job readiness training including resume preparation, interviewing skills, and job search?			
Co-enrollment in Occupational Training	**Yes**	**No**	**Some**
20. Have you met with occupational deans to discuss viable, high demand options for IET co-enrollment?			
21. Have you established relationships with program chairs and/or occupational faculty in selected options?			
22. Does your IET schedule provide for contextualized adult education, soft skills, and occupational training offered concurrently?			
23. Have you developed promotional materials to ensure that the IET occupational training areas you selected are attractive to your students?			
24. Have you conducted outreach to area employers, local One Stop, and/or college's customized training program to determine options for providing on-the-job training in conjunction with IET?			
Work-based Learning (optional)	**Yes**	**No**	**Some**
25. Have you developed opportunities for students to participate in paid or unpaid internships to practice soft skills and/or gain experience in occupational skills?			

Category/Item: IMPLEMENTING	Yes	No	Some
26. Do you have a clearly defined Memorandum of Understanding with work-based learning partners?			

Category/Item: EVALUATING	Yes	No	Some
1. Have you analyzed the data from your selected key performance indicators?			
2. Based on your data, what worked well?			
3. Based on your data, what changes or improvements do you need to make?			

Thank you for the opportunity to share these resources with you. If you have questions or want to follow up, feel free to contact me.

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