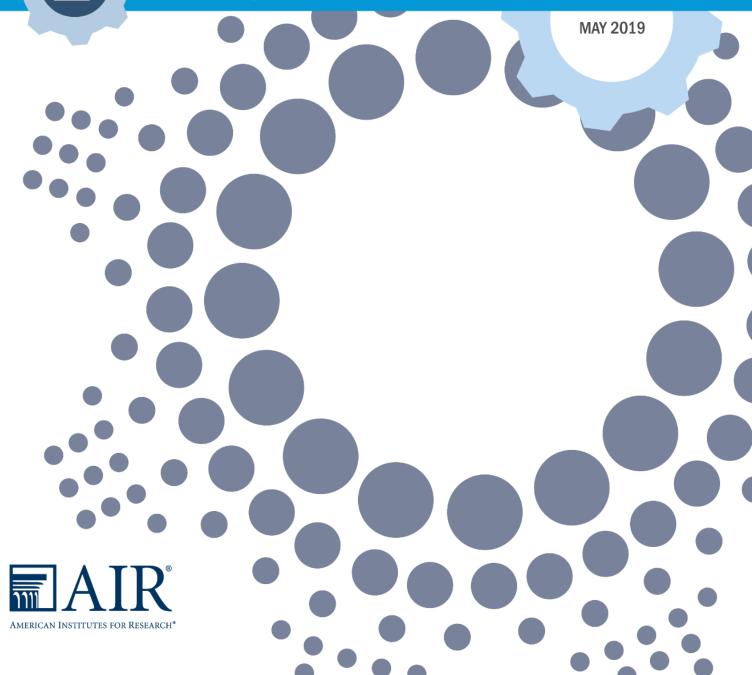
COLLEGE & CAREER READINESS & SUCCESS Center

at American Institutes for Research

Work-Based Learning Measures Series Module 1: Selecting Appropriate Measures

HANDOUTS | By Jessica Giffin





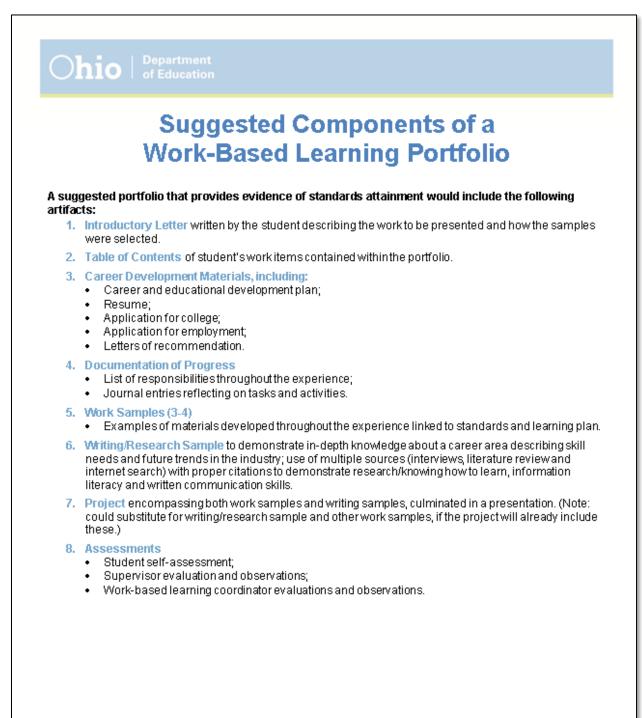
Handouts: Module 1: Selecting Appropriate Measures

Directions: Use this set of handouts to complete the discussion and activities outlined in Work-Based Learning Measures Module 1: Selecting Appropriate Measures. Use the handouts to recap the decisions points; to capture notes from the slides, including key decisions that resonate with you; and to note the final decisions determined by the team.

Samples of Work-Based Learning Measures

Review the sample of each type of work-based learning measure, and discuss and respond to the guiding questions on Slide 16.

Portfolio: Ohio



September 2016

Rubric: Tennessee

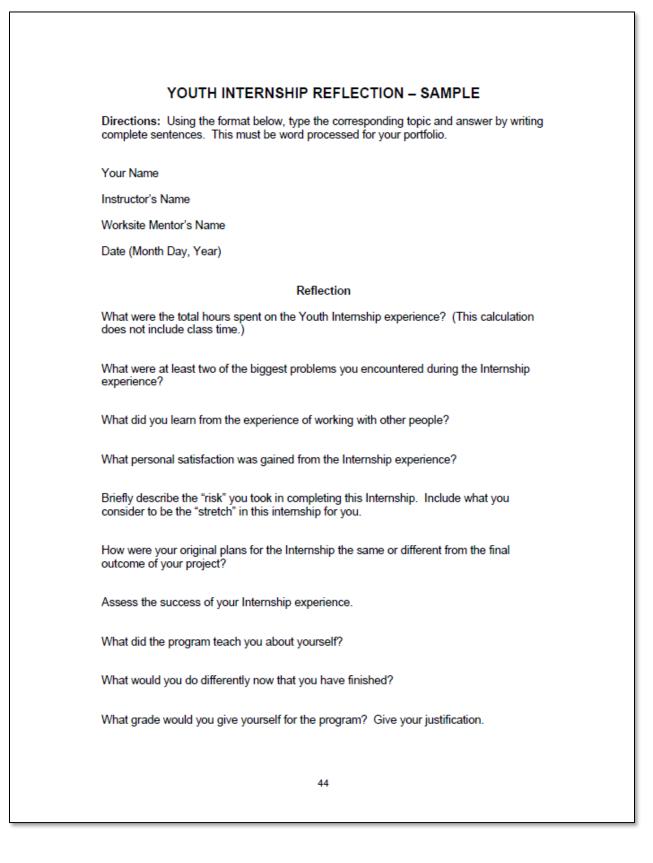
Level 1 Novice	Level 2 Approaching Proficiency	Level 3		Studen
	Approaching Proficiency	Demonstrates Proficiency	Level 4 Approaching Expertise/Leadership	Skill Level (1-4)
sponds to familiar ople and situations, and Idom asks questions out workplace practices career pathways.	Follows safety procedures and occasionally asks questions about other workplace practices, and education and career pathways.	Routinely asks about workplace practices and safety issues in addition to following safety procedures, and seeks information about education and career requirements and opportunities.	Goes beyond following and seeking information about workplace practices and career pathways for self, and seeks to clarify and share information with peers.	
proaches tasks in miliar or ways, tends to t stuck repeating familiar ays even when they are t productive.	Occasionally will offer an idea about different way to do something, and will try a different approach when things do not turn out as expected.	Regularly looks for ways to be more efficient or productive in assigned tasks, and ways to improve products or services.	Inspires and encourages others to look for ways to be more efficient or productive in assigned tasks and ways to improve products and services.	
cepts information given thout questioning urces, relies on past perience in problem- lving situations.	Sometimes questions sources or reasoning behind a claim when encouraged and shown how, and uses reasoning and evidence in problem-solving situations.	Consistently seeks to evaluate the quality of sources and review reasoning behind claims, and uses evidence and reason in both familiar and novel problem-solving situations.	Able to explain, and demonstrate to others how to evaluate the quality of sources and reason from evidence in both familiar and novel problem- solving situations.	
eaks in familiar rnacular irrespective of dience or purpose, sumes understanding ten listening.	Learning to adjust speech based on audience, setting, and the purpose of communication. Sometimes checks understanding by asking questions when listening.	Routinely adjusts speech based on both audience and purpose in both personal interactions and formal presentations, and checks understanding by asking questions and paraphrasing.	Helps others attend to differences in audience, purpose, and setting, including cultural differences, to create opportunities to improve effectiveness of communication.	
mfortable working with ends or like-minded dividuals from similar ckgrounds. Has difficult ne negotiating conflicts.	Works well as a team member when roles and goals are clearly defined. Sometimes able to negotiate conflict to achieve an intended result.	Works well with others and recognizes and builds on different strengths of team members. Can usually manage conflict to achieve an intended result.	Models behaviors, including sensitivity to cultural, generational, and personality differences, that promote collaboration and working productively as a team.	
c ppm t ayt othur plu e rrd si e e e e e e e e e e e e e e e e e e	areer pathways. roaches tasks in iliar or ways, tends to stuck repeating familiar rs even when they are productive. epts information given nout questioning rces, relies on past erience in problem- ing situations. aks in familiar nacular irrespective of ience or purpose, umes understanding en listening. Infortable working with nds or like-minded viduals from similar kgrounds. Has difficult	areer pathways.roaches tasks in illar or ways, tends to stuck repeating familiar rs even when they are productive.Occasionally will offer an idea about different way to do something, and will try a different approach when things do not turn out as expected.epts information given nout questioning rces, relies on past erience in problem- ing situations.Sometimes questions sources or reasoning behind a claim when encouraged and shown how, and uses reasoning and evidence in problem-solving situations.aks in familiar nacular irrespective of ience or purpose, umes understanding en listening.Learning to adjust speech based on audience, setting, and the purpose of communication. Sometimes checks understanding by asking questions when listening.Morks well as a team member when roles and goals are clearly defined. Sometimes able to negotiate conflict to achieve an	areer pathways.about education and career requirements and opportunities.iroaches tasks in illar or ways, tends to stuck repeating familiar rs even when they are productive.Occasionally will offer an idea about different way to do something, and will try a different approach when things do not turn out as expected.Regularly looks for ways to be more efficient or productive in assigned tasks, and ways to improve products or services.epts information given out questioning rces, relies on past erience in problem- ing situations.Sometimes questions sources or reasoning behind a claim when encouraged and shown how, and uses reasoning and evidence in problem-solving situations.Consistently seeks to evaluate the quality of sources and review reasoning behind claims, and uses evidence and reason in both familiar and novel problem-solving situations.aks in familiar nacular irrespective of ience or purpose, umes understanding en listening.Learning to adjust speech based on audience, setting, and the purpose of communication. Sometimes checks understanding by asking questions when listening.Routinely adjusts speech based on both audience and purpose in both personal interactions and formal presentations, and checks understanding by asking questions and paraphrasing.Morks well as a team member viduals from similar kgrounds. Has difficultWorks well as a team member when roles and goals are clearly defined. Sometimes able to negotiate conflict to achieve anWorks well with others and recognizes and builds on different strengths of team members. Can usually manage conflict to achieve	areer pathways.about education and career requirements and opportunities.peers.iliar or ways, tends to stuck repeating familiar is even when they are productive.Occasionally will offer an idea about different way to do something, and will try a different approach when things do not turn out as expected.Regularly looks for ways to be more efficient or productive in assigned tasks, and ways to improve products or services.Inspires and encourages others to look for ways to be more efficient or productive in assigned tasks, and ways to improve products or services.Inspires and encourages others to look for ways to be more efficient or productive in assigned tasks and ways to improve products and services.epts information given nout questioning rig situations.Sometimes questions sources or reasoning behind a claim when encouraged and shown how, and uses reasoning and evidence in problem-solving situations.Consistently seeks to evaluate the quality of sources and review reasoning behind claims, and uses evidence and reason in both familiar and novel problem-solving situations.Able to explain, and demonstrate to others how to evaluate the quality of sources and reason from evidence in both familiar and novel problem-solving situations.aks in familiar nacular irrespective of ience or purpose, em fortable working with nds or like-minded widuals from similar kgrounds. Has difficultLearning to adjust speech based on audience, setting, and the purpose of communication. Sometimes ones and goals are clearly defined. Sometimes able to negotiate conflict to achieve an goals are clearly defined. Sometimes able to negotiate conflict to achieve anRoutinely adjusts speech based on

Employability Skills	Level 1 Novice	Level 2 Approaching Proficiency	Level 3 Demonstrates Proficiency	Level 4 Approaching Expertise/Leadership	Student Skill Level (1-4)
Information Literacy	Able to access information from familiar sources. Has difficulty organizing or evaluating information accessed.	Shows interest in learning how to access information from unfamiliar sources, and sometimes uses provided criteria to evaluate and organize information.	Usually able to locate, understand, organize, and evaluate information from familiar and unfamiliar sources using criteria most relevant to the task and setting.	Is frequently called on to explain to, or assist others in locating, understanding, organizing, or evaluating the quality and relevance of information from multiple sources.	
Technology Literacy	Uses familiar technologies in familiar ways. Little interest in learning new uses of familiar or new technologies.	Sometimes willing and able to learn new uses of familiar and new technologies, and shows interest in learning how to determine what is most appropriate.	Routinely uses, and learns new uses of, familiar and new technologies. Usually able to determine the most appropriate technology for a particular use without being told.	Teaches others how to use technologies and explains to others the criteria for judging the appropriateness of particular technologies for particular purposes.	
Initiative & Self- Direction	Completes assigned tasks with normal supervision if familiar, but requires constant supervision to complete unfamiliar tasks.	Will sometimes ask questions as needed to complete assigned tasks, and begins to self-monitor progress without constant supervision.	Routinely exhibits initiative and self-direction in completing assigned tasks, asking questions as needed, and keeps supervisor informed of progress.	Uses knowledge of self-motivation and self-regulation skills to motivate others and lead by example in completing assigned tasks.	
Professionalism & Ethics	Dresses and acts "professional" based on experience. May not take responsibility for mistakes or misconduct.	Makes visible efforts to imitate professional etiquette, standards, and ethics from professionals in the workplace. Takes responsibility for mistakes or misconduct.	Demonstrates professionalism in dress and behavior consistent with standards and workplace norms. Shows concern for professional ethics in addition to taking personal responsibility for mistakes and misconduct.	Is able to articulate and model the situational nature of some aspects of professionalism such as dress and etiquette, and the fundamental importance of standards and ethics.	
Adaptability & Flexibility	Comfortable switching among familiar behaviors or roles but uncomfortable with unfamiliar change in the environment.	Makes an effort to adapt to unfamiliar change in the environment and/or tries to be more flexible with encouragement and when the need is pointed out.	Usually adapts to changes in the environment without needing to be told, and is flexible in taking on different roles and responsibilities as required.	Notices changes in the environment that require adaptation or flexibility and helps others explore ways to adapt or be flexible to better achieve an intended outcome.	
Productivity & Accountability	Completes assigned tasks when the task is familiar and there are no unexpected obstacles. Has difficulty accepting constructive criticism.	Shows a beginning awareness of the importance of managing time, and persisting in the face of obstacles, to complete tasks. Accepts constructive criticism.	Routinely uses time-management skills to overcome obstacles and complete assigned tasks on time and to agreed-upon standards, requesting feedback on performance.	Helps co-workers manage time and overcome obstacles, and helps create shared sense of accountability among coworkers to supervisors and customers for delivering work on time and to agreed-upon standards.	

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Employer Feedback: California

Student's Name: Supervisor's Name:			Er St	mploγer: upervisor's Title:		
Please check the boy in the various aspect			uras	sessment of the stud	ent's	performance
Courtesy		Very Polite & Well Mannered		Reasonably Polite		Impolite
Punctuality		Arrivesontime		Acceptable		AlwaysLate
Cooperation		Creates a pleasing impression		Acceptable		Difficult to work with
Reaction to Criticism		Reactspositively		Doesn't seem to care		Dislikescriticism
Neatness in work and appearance		Careful with work and appearance		Usually Neat & Clean		Careless at work & untid y
Perseverance		Persistent		Acceptable		Give up easily
Work Attitude		Eagerinterest		Normal interest		Appears in different
Initiative		Seeks Additional work		Waits tobe told what todo		Lacking
Ability to Communicate		Easilyabletouse languageskills		Has some trouble articulating their thoughts		Lackingintheir thoughtsinto words
Ability to Comprehend Instructions		Quick to understand		Reasonably good		Slowto comprehend
Capacity to develop		Promising		Average		Not very promising
Additional Comments	s if A	pplicable:				
Supervisor's Name: _						
Supervisor's Signatu	re:			Da	te:	
Thank yo	ufo	r taking the time to	com	olete this Evaluation F	Form).



Decision Point 1: Determine Goals for Measuring Work-Based Learning

Capture key information for your state's work-based learning activities. This information will inform your state's broader goals for work-based learning measurement.

State work- based learning definition					
Consider the key	Circle the goal(s) that apply to your definition. In the empty column, capture relevant notes and considerations for which measures align with each purpose.				
goal(s) of definition	Workplace readiness		 Portfolio Rubric Employer Feedback Self-Assessment 		
	Knowledge or technical skill development		 Portfolio Rubric Employer Feedback Self-Assessment 		
	Experience in real workplace settings		 Portfolio Rubric Employer Feedback Self-Assessment 		
	Connect to a career pathway		 Portfolio Rubric Employer Feedback Self-Assessment 		
	Compensate students for work experience		 Portfolio Rubric Employer Feedback Self-Assessment 		
	Other		 Portfolio Rubric Employer Feedback Self-Assessment 		

Group consensus: What are the goals of work-based learning?

1.	
2.	
3.	
4.	
••	

Decision Point 2: Determine Who Selects the Work-Based Learning Measure

Put a checkmark in the option that best resonates with you. Capture any notes, including why an option resonates or does not resonate; questions for team members; and ideas or options to consider.

State	District	Student/School
Notes	Notes	Notes

Group consensus: Who selects measures?

Decision Point 3: Define Work-Based Learning Knowledge and Skills

Part A: Review the types of knowledge and skills that could be assessed in a work-based learning experience, and identify which type(s) you want to assess.

Туре	Description	Notes	Aligned Measures
Academic Knowledge	Knowledge and skills associated with subject-matter areas such as English, mathematics, and science		 Portfolio Rubric Employer Feedback Self-Assessment
Technical Skills	Skills needed for specific occupations or careers		 Portfolio Rubric Employer Feedback Self-Assessment
Employability Skills	General knowledge and skills that are necessary for success in the labor market at all employment levels in all sectors		 Portfolio Rubric Employer Feedback Self-Assessment

Group consensus: What knowledge and skills will you assess?

Guiding Question	Notes	Stakeholders
What are the leading or growing industries in your region?		
Who are the leading employers in your region?		
What employers are currently providing work-based learning opportunities to your students?		
Who are the business and workforce development groups in your area?		

Part B: Discuss and answer the following guiding questions to help determine which stakeholders will define the knowledge and skills.

Part C: Review the list of knowledge and skills items on the Skills Bank on pages 12–18. Consider the type of knowledge and skills you selected for Decision Point 3. Solicit feedback on your selected knowledge and skills with your stakeholders. Capture your final list of defined knowledge and skills to measure from work-based learning below.

Knowledge and Skills	
1.	
2.	
3.	
4.	
5.	
6.	
7.	

Skills Bank

The following table provides sample knowledge and skills from national organizations and state education agencies. The table includes who created the resource, a link to the resource, the types of knowledge and skills, and a summary describing the knowledge and skills. Use the samples from this table to help define your knowledge and skills with stakeholders.

Source	Resource	Types of Knowledge and Skills	Knowledge and Skills Summary
The National Association of State Directors of Career Technical Education Consortium	The Career Ready Practices	Academic Knowledge and Employability Skills	 There are 12 career ready practices that define the skills educators should seek to develop among all students: 1. Act as a responsible and contributing citizen and employee. 2. Apply appropriate academic and technical skills. 3. Attend to personal health and financial well-being. 4. Communicate clearly and effectively and with reason. 5. Consider the environmental, social, and economic impacts of decisions. 6. Demonstrate creativity and innovation. 7. Employ valid and reliable research strategies. 8. Utilize critical thinking to make sense of problems and persevere in solving them. 9. Model integrity, ethical leadership, and effective management. 10. Plan education and career paths aligned to personal goals. 11. Use technology to enhance productivity. 12. Work productively in teams while using cultural global competence.
The National Association of Colleges and Employers	Career Readiness for the New College Graduate: A Definition and Competencies	Employability Skills	 Critical thinking/problem solving Oral/written communications Teamwork/collaboration Digital technology Leadership Professionalism/work ethic Career management Global/intercultural fluency

Source	Resource	Types of Knowledge and Skills	Knowledge and Skills Summary
U.S. Department of Education and supporting business organizations and federal agencies	The Employability Skills Framework	Academic Knowledge and Employability Skills	 The framework divides employability into three categories, each with its own subcategories: 1. Workplace Skills a. Resource Management b. Information Use c. Communication Skills d. Systems Thinking e. Technology Use 2. Applied Knowledge a. Applied Academic Skills b. Critical Thinking Skills 3. Effective Relationships a. Interpersonal Skills b. Personal Qualities
Arizona Skills Standards Commission and Arizona Department of Education	Arizona Professional Skills: <u>Standards,</u> <u>Measurement</u> <u>Criteria, and Core</u> <u>Actions</u>	Employability Skills	 Complex Communication: Employs complex communication skills in a manner that adds to organizational productivity. Collaboration: Collaborates, in person and virtually, to complete tasks aimed at organizational goals. Thinking and Innovation: Integrates expertise in technical knowledge and skills with thinking and reasoning strategies to create, innovate, and devise solutions. Professionalism: Conducts oneself in a professional manner appropriate to organizational expectations. Initiative and Self-Direction: Exercises initiative and self-direction in the workplace. Integrational and Cross-Cultural Competence: Interacts effectively with different cultures and generations to achieve organizational mission, goals, and objectives. Organizational Culture: Functions effectively within an organizational culture.

Source	Resource	Types of Knowledge and Skills	Knowledge and Skills Summary
			 Legal and Ethical Practices: Observes laws, rules, and ethical practices in the workplace. Financial Practices: Applies knowledge of finances for the profitability and viability of the organization.
Colorado Department of Education	Career Readiness: Essential Skills Needed for the Workforce of Educational Opportunities Beyond High School	Employability Skills	 The Colorado Department of Education's website depicts four areas of core skills needed for the workforce and continued education. Each of these four areas has its own set of core skills: 1. Entrepreneurial: a. Critical thinking and problem solving b. Creativity and innovation c. Inquiry and analysis d. Risk taking 2. Personal: a. Initiative and self-direction b. Personal responsibility and self-management c. Adaptability and flexibility d. Personal awareness e. Learn independently f. Perseverance 3. Civic/Interpersonal: a. Core academic foundation b. Collaboration and teamwork c. Communication d. Global and cultural awareness e. Ethics and integrity 4. Professional: a. Time management b. Career literacy c. Grit and resilience

Source	Resource	Types of Knowledge and Skills	Knowledge and Skills Summary
			d. Work ethic; dependable and reliablee. Self-advocacy
Hawaii Department of Education	<u>Hawaii Pathway</u> <u>CORE Standards</u>	Technical Skills	 The Hawaii Department of Education developed standards for each career pathway that includes the knowledge and skills required for occupations within specific career pathways. The pathway standards are business and industry validated, and the performance standards are common to the occupations in the clusters within the career pathways. There are six career pathways: Arts and Communication Business Health Services Industrial and Engineering Technology Natural Resources Public and Human Services Note: Standards for each of these career pathways are contained within the links labeled "CORE Standards."
Idaho Career and Technical Education	Workplace Skills for Career <u>Readiness</u> <u>Standards</u>	Academic Knowledge and Employability Skills	 Idaho Career and Technical Education defines workplace skills for career readiness within three main standards, each with its own performance indicators, and definitions and instructional strategies: 1. Demonstrate personal qualities and people skills 2. Demonstrate professional knowledge and skills 3. Demonstrate technology knowledge and skills
Maine Department of Education	Career and Education Development	Academic Knowledge and Employability Skills	 The Maine Department of Education divides its career exploration and development standards into three stages: 1. Learning about self-knowledge and interpersonal relationships 2. Learning about and exploring education, career, and life goals 3. Learning to make decisions, plan and create opportunities, and make meaningful contributions

Source	Resource	Types of Knowledge and Skills	Knowledge and Skills Summary
			Each of these stages has a set of performance indicator labels and descriptors separated into grade-level clusters.
Massachusetts Office of Elementary and Secondary Education	<u>Work-Based</u> <u>Learning Plan</u>	Academic Knowledge, Technical Skills, and Employability Skills	 Massachusetts assesses students on a list of employability skills and then selects from a variety of other types of skills based on the student's workbased learning experience. The categories of knowledge and skills include: 1. Employability Skills 2. Career/Engagement Skills 3. Digital Literacy Skills 4. Applied Academic Skills 5. STEM-Related Skills 6. Technical/Career-Specific Skills
Minnesota Department of Education	Minnesota State- Approved Technical Skill Assessments	Academic Knowledge and Employability Skills	 The Minnesota Department of Education divides its technical skill assessments into 10 topics. Each topic has its own performance indicators, and there are performance measures for each performance indicator. The 10 topics are: Academic Foundations Communications Problem-Solving and Critical Thinking Information Technology Applications Systems Safety, Health, and Environmental Leadership and Teamwork Ethics and Legal Responsibilities Career Development, Employability, and Citizenship Technical Literacy (indicators and performance measures divided among individualized career pathways)
Montana Office of Public Instruction	Montana Standards for Workplace Competencies	Employability Skills	These six content standards for workplace competencies are:

Source	Resource	Types of Knowledge and Skills	Knowledge and Skills Summary
Source Nebraska Department of Education	Resource Nebraska Standards for Career Readiness	Skills Academic Knowledge and Employability Skills	 Workplace Resources: Students identify, organize, plan, and allocate workplace resources of time, money, materials, facilities, and human resources. Interpersonal Workplace Skills: Students acquire and demonstrate interpersonal workplace skills. Workplace Information: Students acquire and use workplace information. Workplace Systems: Students demonstrate an understanding of how social, organizational, and technological systems work. Workplace Technology: Students work safely with a variety of workplace technologies. Workplace Readiness/Life & Career Planning: Students acquire and demonstrate skills in life and career planning and workplace readiness. In Nebraska, a career-ready individual: Applies appropriate academic and technical skills (academic attainment, technical skill attainment, strategic thinking) Communicates effectively and appropriately (speaking, writing, presentations, professional etiquette, customer service) Contributes to employer and community success (personal responsibility, meets workplace expectations, civic responsibility and service)
		5	 Makes sense of problems and perseveres in solving them (perceptiveness, problem solving, perseverance/work ethic) Uses critical thinking (critical thinking, decision making, adaptability)
			6. Demonstrates innovation and creativity (creativity, innovation)
			7. Models ethical leadership and effective management (leadership, ethics, management)
			8. Works productively in teams and demonstrates cultural competency (teamwork, conflict resolution, social and cultural competence)

Source	Resource	Types of Knowledge and Skills	Knowledge and Skills Summary
			9. Utilizes technology (data gathering access and management, tools and applications, technology ethics)
			10. Manages personal career development (planning, job seeking, resumes/portfolios/interviews, professional development, entrepreneurship)
			Attends to personal and financial well-being (personal well-being, financial well-being)
Oregon Department of Education	Oregon Skill Sets	Technical Skills	The Oregon Department of Education lists six career learning areas on its website:
			1. Agriculture, Food, and Natural Resource Systems
			2. Arts, Information, and Communications
			3. Business and Management
			4. Health Sciences
			5. Human Resources
			6. Industrial and Engineering Systems
			Each of the above career learning areas contains multiple clusters. These clusters contain focus area knowledge and skill statements.
Utah State Board of Education	Skill Grids	Technical Skills	The Utah State Board of Education created "skill grids" outlining the specific skills need by occupation or industry, including accounting, child care, dental assistant, fire fighter, office clerk, politician etc.

Decision Point 4: Plan for Supporting Work-Based Learning Measure Implementation

As an individual, consider the different factors that support quality implementation, and take notes on important things to consider or include.

Group consensus: Identify which stakeholder(s) will take responsibility for leading the specific implementation factors and the general timeline for addressing the factor.

Implementation Factor	Notes/Considerations	Stakeholder Responsible	Timeline for Addressing Factor
Training and		State	
Resources		District	
		School	
		Teacher	
		Employer	
		Other	
Calibration		State	
		District	
		School	
		Teacher	
		Employer	
		Other	
Communication		State	
		District	
		School	
		Teacher	
		Employer	
		Other	
Stakeholder		State	
Engagement		District	
		School	
		Teacher	
		Employer	
		Other	

Decision Point 5: Select Work-Based Learning Measure(s)

With your group, discuss the following guiding questions to confirm your selected work-based learning measures and planning next steps.

Goals for Measuring Work-Based Learning
Review your goals for measuring work-based learning from Decision Point 1. Based on your goals, which work-based learning measure(s) will help achieve your goal(s) and why?
What additional resources or supports will be needed to achieve your goal(s)?
Brainstorm the next five steps you need to take to achieve your goal(s).

Knowledge and Skills

Review your list of knowledge and skills selected from Decision Point 3. Based on your list, which measure do you recommend for assessing these knowledge and skills?

What resources and supports will teachers, students, and employers need to understand these knowledge and skills?

Brainstorm the next five steps to develop the needed resources and supports identified above.

Supporting Implementation

Based on the level of intensity for each implementation success factor, which work-based learning measure do you recommend? Does it still fit with your goal for measuring work-based learning and the knowledge and skills to assess?

Review your implementation planning from Decision Point 4. Brainstorm your next five steps to prepare for implementing measuring work-based learning.

What additional resources and supports do you need to support training, calibration, communication, and stakeholder engagement?

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