Single Set of Learning Objectives Example from the IET Toolkit

New Mexico Note: The SSLO Template from the IET Toolkit varies slightly from the New Mexico SSLO Template. However, you can see how the components of the SSLO work together from these examples. Use the <u>New Mexico SSLO Template</u> when writing your objectives.

A sample completed SSLO template with integrated learning objectives is below. The full list of learning objectives is in the shaded area at the top of the table. In the subsequent rows, one objective from the set has aligned skills and competencies from the three required components along with the applicable adult education standards. Note that some units may have more than one integrated learning objective.

Single Set of Learning Objectives Example

MANUFACTURING IET PROGRAM

Single Set of Learning Objectives:

- **1.1 Given** a micrometer, a 6" scale, a simple manufacturing specification blueprint with missing measurements, and a math worksheet, learners will apply knowledge of fractions and decimals to take and record precise measurements in both decimal and fractions and use the measurements to answer fraction and decimal addition and subtraction questions with 80% accuracy.
- **2.1 During** a demonstration of machine usage, the learner will use machine-specific safety for the purpose of maintaining a safe working environment and develop a personal job aid with 100% accurately described safety practices in both the workplace and when using specific machinery.
- **3.1 Given** customer specifications for a product, learners will demonstrate an understanding of the manufacturing process order of operations by writing a detailed set of instructions for producing the product to the customer specifications with at least 80% accuracy, and orally explain the steps with classmates.
- **3.2 Given** customer specifications for a product, the learner's written instructions for manufacturing the product, and the necessary tools and equipment, learners will demonstrate the necessary knowledge and skills for using the equipment by producing the product to the customer specifications with at least 80% accuracy.

Unit 1: Taking and Recording Measurements on a Blueprint

Integrated Learning Objective(s):

1) Given a micrometer, a 6" scale, simple manufacturing specification blueprint with missing measurements, and a math worksheet, learners will apply knowledge of fractions and decimals to take and record precise measurements in decimals and fractions and use the measurements to answer fraction and decimal addition and subtraction questions with 80% accuracy.

Workforce Training Skills and Competencies	Adult Education Content	Adult Education Literacy	Workforce Preparation
	Standard(s)	Skills and Competencies	Skills and Competencies
 Read a 6" scale Read a micrometer Read a simple blueprint 	 Extend understanding of fraction equivalence and ordering (Mathematics 4.NF.1 – 4.NF.2) Build fractions from unit fractions by applying and extending previous understanding of operations on whole numbers. (Mathematics 4.NF.3 – 4.NF.4; 5.NF.1 - 5.NF.6) 	 Convert measurements from inches to centimeters Convert whole numbers to fractions Add and subtract fractions 	 Apply mathematical operations, concepts, and reasoning Demonstrate quality consciousness Demonstrate self-management strategies Work within a team

Unit 2: Maintaining a Safe Working Environment

Integrated Learning Objective(s):

1) During a demonstration of machine usage, the learner will use machine-specific safety for the purpose of maintaining a safe working environment and develop a personal job aid with 100% accurately described safety practices in both the workplace and when using specific machinery.

Workforce Training Skills and Competencies	Adult Education Content	Adult Education Literacy	Workforce Preparation
	Standard(s)	Skills and Competencies	Skills and Competencies
 Understand and apply shop safety practices Understand and apply machine safety practices 	 Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments (CCRS Reading 2 D) Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks (CCRS Reading 3 D) 	Integrate information presented in different media or formats (e.g., in charts, graphs, photographs, videos, or maps) as well as in words to develop a compendium of key aspects of safety required in the manufacturing industry	 Reads with Understanding Applies Health and Safety Concepts Observes Critically Locates and Uses Resources Demonstrates Self-management Strategies

Unit 3: Maintaining a Safe Working Environment

Integrated Learning Objective(s):

- 1) Given customer specifications for a product, learners will demonstrate an understanding of the manufacturing process order of operations by writing a detailed set of instructions for producing the product to the customer specifications with at least 80% accuracy, and orally explain the steps with classmates.
- 2) Given customer specifications for a product, the detailed set of instructions for manufacturing the product written by the learner, and the necessary tools and equipment, learners will demonstrate the necessary knowledge and skills for using the equipment by producing the product to the customer specifications with at least 80% accuracy.

Workforce Training Skills and Competencies	Adult Education Content	Adult Education Literacy	Workforce Preparation
	Standard(s)	Skills and Competencies	Skills and Competencies
 Understand and apply manufacturing process order of operations Understand and apply concepts of tolerances in manufacturing 	 Analyze a complex sequence of events and explain how events interact and develop over the course of a text such as a procedural manual (CCRS 3 E) Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification (CCRS SL.3.6) 	 Learners will follow a multistep procedure when building a model airplane. Learners will learn about the steps of a quality improvement process, including performing quality checks, documenting quality, and taking action. Learners will interact in a range of collaborative discussions (one on-one, in groups, using terminology related to order of operations and tolerances). 	 Solves Problems Understand Process, Product, and Service Demonstrates Self-management Strategies Speaks Clearly and Concisely