

Background

The Better Buildings Workforce Accelerator (BBWA) is a DOE initiative seeking to raise the level of building science and energy efficiency knowledge in the nation's building-related workforce. Through the BBWA, DOE engages industry partners in activities that build interest and awareness, streamline pathways, and improve skills for people pursuing green building careers.

In May of 2023, the BBWA hosted a workshop to share tools and resources to support BBWA partners in designing, refining, and evaluating workforce programs.

This fact sheet highlights key takeaways and resources from the workshop, focused on more effectively meeting the needs of trainees, partners, and other stakeholders by aligning goals and objectives with evaluation metrics.

Key Insights

The following summarizes key points from the event presenters.

► Program design and evaluation is iterative.

When creating a new workforce program, follow all five steps listed in the graphic below, starting with documenting the need for your program, working through implementation, and measuring the success of the outcomes.



Program evaluation is not the end of the process. Instead, it is an opportunity to revisit each of the previous steps to understand what may have changed, and what may need to be adjusted to make the program more impactful moving forward.

► Use goals and objectives to define the roadmap.

Goals define desired outcomes and explain why they are important, while objectives describe *how* to achieve those outcomes. Writing clear goals upfront can help ensure that everything else done in the program – from writing objectives and choosing partners to creating application forms and teaching a new skill – is consistent and aligned. This makes the program more clear, effective, and accessible for trainees and can help program staff save time and resources.

► Objectives must be SMART.

When writing workforce program or learning objectives, be sure that each one is **Specific, Measurable, Achievable, Realistic, and Time-Bound**. Incorporating these attributes allows the objectives to guide the rest of the program process, helping to meet program goals.

► Think holistically about how to measure success.

The “M” in SMART is for **Measurable**, meaning that every objective must have at least one associated metric that can measure how that objective has been met. Choosing metrics carefully can help illustrate and communicate success and meet program goals. For example, only measuring demographic data for participants might not fully capture how a program engaged and recruited more diverse participants. Similarly, quantitative metrics alone may not tell the whole story and can be supplemented by qualitative measures like storytelling or quotes from participants or stakeholders.

► Focusing on evaluation from the start can improve the whole process.

Sometimes, program evaluation is an afterthought, or is dictated and confined by reporting requirements. Knowing how to share program outcomes beforehand can help bring the right partners to the table. It can also influence the participant recruitment process, often determining what or how participants are taught, as well as how to engage with participants throughout the training experience. It can also help set expectations for the program, trainees, and partners and stakeholders.

The worksheet on the final page provides an illustration of program evaluation strategies.

Key questions when crafting goals, objectives, and evaluation criteria

1. Who is the audience? What existing knowledge or skills should they have?
2. What conditions might need to be present in order for learners to meet program/learning objectives (e.g. what specific training, support, or other resources might need to be provided)?
3. To what level do learners need to develop and demonstrate proficiency?
4. What competencies and resources does the program have to support learners through training and supportive services? What partners might be needed to help learners meet program objectives?
5. What evaluation criteria do program partners need for their programming and reporting? How can the program implementation team incorporate that into the process?

Table 1. Resources for Green Building Workforce Program Design and Evaluation

Writing Goals and Objectives
Sample Verbs for Writing Learning Objectives
Worksheet for Writing Workforce and Training Program Goals and Objectives
ADDIE Model for Instructional Design
Evaluation Metrics and Frameworks
List of Potential Workforce Program Evaluation Metrics
Work-Based Learning Data Collection Toolkit
Illinois Workforce Innovation Board Evaluation Toolkit
General Resources
Worksheet for Aligning Goals, Objectives, and Metrics (see sample on next page)
BBWA Program Design and Evaluation Workshop – Full Slide deck
Contractor Engagement and Workforce Development Handbook
High-Road Workforce Guide for City Climate Action

For more information and resources on the Better Buildings Workforce Accelerator, visit the [Better Buildings Workforce Development portal](#).

Aligning Goals, Objectives, and Evaluation Metrics

The following is an example from a fictitious program, showing how a training organization might think through and align goals, objectives, and metrics early on in program design.

GOAL*	OBJECTIVES *	METRICS*	HOW IS IT MEASURED?	WHEN/HOW OFTEN IS IT MEASURED?
Improve knowledge and skill competencies of current and future home energy retrofit workers in my county in order to enhance the quality and timeliness of work.	Meet with a minimum of 3 area employers in the first quarter of the year to identify/update key skills needed.	<ul style="list-style-type: none"> Number of employers contacted Number of meetings completed 	Program staff must log employer contacts and meetings in program tracker	Review outcomes at the end of each program year. Staff should log meetings at least monthly.
	Offer 5 hands-on training courses each year (3 for training new workers and 2 for upskilling existing workers).	<ul style="list-style-type: none"> Number of new worker trainings completed Number of upskilling trainings completed 	All training dates and associated resources will be saved in the program folder	Review outcomes at the end of each program year. All training resources should be updated at least monthly.
	Assess the skills of all participants who complete a course for a minimum of 3 skills badges.	<ul style="list-style-type: none"> Number of skills evaluations administered Number of participant badges earned in each category 	All trainers must review trainee performance against each element outlined in the standard work specifications. Each trainee will receive a score and written comments describing level of proficiency. All data must be saved in trainee profile.	Review outcomes at the end of each training course and each program year. Trainers must enter trainee assessment at the time of evaluation.
	Within 1 year, increase the number of program participants sitting for industry certification exams by 10%.	<ul style="list-style-type: none"> Number of trainees enrolled in certification exams Number of trainees that receive certifications 	Data will be solicited from certification partner	Review outcomes at the end of each program year. Request report from certification partner quarterly.

* Refer to the worksheets, sample verbs, and list of evaluation metrics documents found in the resources table.