

# Adult Learners

## Effective Training Methods

By Scott P. Smith

**A**dult learners do not want to be taught. They want to play a part and need to perceive training as something that will improve them as individuals. “Adult learners like to be in control of their training or at least play a role in it” (Dalto, 2015). They not only seek training in areas that are relevant to them, but find further motivation to learn and feel a greater sense of accomplishment when they are involved in identifying training needs.

A wide range of training modalities can be used, including in-person classroom sessions, virtual live sessions and self-paced e-learning. Many organizations embrace e-learning tools because of their ease of deployment, lower costs and increased learner convenience. “E-learning can be defined as the use of computer network technology, primarily over an intranet or through the Internet, to deliver information and instruction to individuals (in our case, employees)” (Welsh, Wanberg, Brown, et al., 2003).

Simulation-based training has been a staple in industries such as aviation and nuclear energy (Jha, Duncan & Bates, 2001). Virtual-reality (VR)-based systems are also becoming more common. “VR has been recognized as having relevance for training in a wide range of industries including construction, medical and space exploration” (Squelch, 2001).

While all these systems are successful in some ways, the literature does not definitively indicate which training modality is best. That said, Burke and colleagues identify one factor that has a direct and positive impact on knowledge retention: engaging the employee in the training (Burke, Sarpy, Smith-Crowe, et al., 2006). “Our findings indicate that the most engaging methods of safety training are, on average, three times more effective than the least engaging methods in promoting knowledge and skill acquisition” (Burke, et al., 2006). Educating adult learners entails selecting the proper tools

and integrating employees themselves into the learning process.

### Needs Assessment, Delivery & Validation

OSH trainers must continuously adapt training content and training delivery. Doing so effectively involves a three-step process (Table 1, p. 24). The first step is to conduct a needs assessment. Training needs include codified requirements and the perceived training needs of employees. By engaging employees in the needs assessment, training becomes more precise. Doing so also helps an organization select a delivery system that best meets employees’ learning needs.

The second step is to select a proper delivery style. For adult learners, this is critical. By choosing the proper tool to engage workers, employers help them stay more focused on training, which increases memory retention. Additionally, incorporating site-specific visuals into training materials helps employees develop a clear idea of what is expected of them.

As Flum, Siqueira, DeCaro, et al. (2010), explain, “The process of taking pictures and presenting them creates an ongoing discussion among workers and management regarding the need for change and for process improvements, and results in greater interest and activity regarding occupational health among workers.” Such a process engages people and generates dialogue among all employees, which ultimately leads to better training content.

The final step involves two measures: 1) content retention as assessed using a short quiz or visual performance review; and 2) a feedback loop that provides management with a measure of training effectiveness. The quiz is based on key training goals, not simply an overview of concepts. The feedback loop involves watching employees perform tasks related to training to assess retention. Data from these measures reveal remaining knowledge gaps and help management identify where improvements in training, delivery style or content, are needed. Employers must also assess whether workers believed the training was effective. By integrating worker feedback into training design, training continually grows and improves.


### Key Factors of the Adult Learner

To see value in training, adult learners must understand why the training is important to them

#### IN BRIEF

- Educating adult learners entails selecting the proper tools to train them with and integrating them into the learning process.
- Integrated training is achieved by including employees throughout the process, from development though validation and feedback.

**Scott P. Smith, M.S., CSP**, is a global risk manager and trainer with a 20-year career working across five continents. He holds a B.S. in Environmental Science from Northern Michigan University, an M.S. in Industrial Hygiene from University of Massachusetts, Lowell, and is pursuing a doctorate in law and policy/international labor law at Northeastern University. Smith is a professional member of ASSE’s Greater Boston Chapter.



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and how completing it will increase their abilities. As Dalto (2015) explains, “Adult learners want training to be relevant to their daily lives and to be focused on completing specific tasks.” It is also important to clearly communicate purpose. “If a health and safety program’s purpose is unclear or appears to benefit the company only, many workers will not take the subject matter seriously. The audience must understand how the training directly relates to their daily personal lives” (Potts, 2016).

To close this gap, the delivery system must be concise and state definitively what the training will do for workers as individuals. By asking employees during training development what they wish they had been taught when they started, training materials grow to meet the demands of longer-term workers as well as younger workers who may have less-developed competencies. The term *employee-driven content* is used to define this functional need.

In general terms, adult learners are self-directed; have years of experience and training; are goal oriented; learn better when properly motivated; and want to feel respected. They do not want to sit in a room and merely listen. “Most programs are developed based on the naive assumption that

safety knowledge can easily be transferred through conventional classroom instructional methods” (Albert & Hallowel, 2013). Adult learners want to be engaged, feel as though their time is being used wisely and believe the material is valuable to their skill set.

Adult learners want to engage with an instructor who can answer their questions and be engaged by this instructor in a learner-centric dynamic (Albert & Hallowel, 2013). Adult learners prefer to be educated by a topic expert, but also want to be trusted to read and learn on their own.

While online training systems are available, these systems are prepackaged and not generally tailored to a specific work environment. When a worker cannot associate the material presented with his/her own work environment or lacks a sense of engagement in the material, the course loses value. “If sufficient attention is not given to implementation, e-learning will not be successful” (Welsh, et al., 2003). Some online training can be modified and adapted to an employer’s workplace. This helps bridge the gap with prepackaged training but it can add cost, hinder annual updating and increase release time.

TABLE 1  
Training Process Steps

Step	Elements
Step 1: Training development process	1) Needs assessment: Multiple or site-specific; develop content. 2) Collect employee feedback on perceived needs; update training. 3) Select best delivery modality based on employee competencies.
Step 2: Training delivery	1) Pedagogical-based small group/discussion based/teacher-student interface. 2) Opens topic up for group discussion based on employee experience. 3) Include pictures of employees' workplace in training.
Step 3: Validation and effectiveness	1) Short quiz or visual performance review 30 days after training to measure program efficiency, retention. 2) Employees provide feedback on perceived training efficiency.

FIGURE 1  
Example Learning Objectives

#### Active Shooter Training

Learning objectives:

- 1) Be able to define the three options to take if you see an active shooter.
- 2) Be able to demonstrate the three actions required and how to stay silent.
- 3) Be able to detail what your support actions will be in the event of an active shooter.

#### Bringing It All Together

##### Employee-Driven Content

Feedback from adult workers often centers around why they need to know what is being covered in training. If this initial mental hurdle is not overcome, any training that follows may be ineffective. An excellent way to address this concern is to integrate the learner into the training development process. By discussing training needs with employee representatives during the needs assessment, an organization can develop training content that is more precise and site-specific. Stating clearly how training will affect employees with buy in from supervisors will further enhance the perceived value of the training.

In many cases, employees are assigned reading materials or asked to complete online training. While Welsh, et al. (2003), agree this can be an easier approach, employers must be careful to design it to engage students. Often, adult learners respond negatively to an hour's worth of slides on a screen or online training delivered by a machine. By providing training materials that clearly identify the expected outcomes and explain the importance of those outcomes to the individual, training transforms into a tool for self-advancement rather than simply a company requirement. It also helps to train employees in small, similar groups and provide materials for further review, as this review allows employees to discuss and

review information on their own time (Figure 1). This gives the employee a sense of freedom in education and promotes self value.

#### Employee Engagement

Learners generally retain 10% of what is read, 20% of what is heard, 30% of what is seen, 50% of material from group discussion, 75% of what is learned through practice and 90% of what they say and do (Booth, 2007). Therefore, a trainer should keep training materials to a few, concise pages to maintain focus on critical details. While the history of lockout/tagout may interest a scholar, it offers little value to employees.

As noted, integrating site photos into training materials adds value in the form of visible stimuli (Flum, et al., 2010). Seeing a lockout tag in a presentation slide adds less value than seeing a lock and tag being properly affixed on a piece of equipment employees encounter each day (Figure 2). Incorporating photos gathered during inspections also enhances training because such photos depict actual risks that employees may encounter in their workplace. This strengthens an employee's retention and understanding because it helps the employee make associations between training and his/her job.

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#### Open Delivery

Workers should be part of the process for scheduling training and planning retraining. As Dalto (2015) explains, "By consulting with your employees, you can create a training schedule that best fits their needs." Often, employers schedule a week's worth of training to occur once a year. This requires all employees to attend training at one time, which increases costs. Performing short, monthly single topic training sessions allows employees time to reflect on each topic. This approach also keeps safety in the forefront year round.


#### Integrated Training & Validation

Integrated training is achieved by including employees throughout the process, from development through validation and feedback. By bringing employees into the development cycle, they become part of the solution. By engaging employees in the training cycle, they feel part of the educational process. Integrating the training perspective of the affected employees/supervisors strengthens training effectiveness. Integrated training validation refers to the process of asking employees directly whether they learned or developed better proficiency through the training and whether the training delivered value. By listening to employees' perspectives on the effectiveness of training, a trainer can continuously improve the training process.



FIGURE 2

## Example of Inspection Findings

Finding	Response level	Recommendations	Photo
There are many cases of improperly implemented LOTO throughout area. It needs to be audited by maintenance and corrections made.	Red - Critical	Correct LOTO applications, retrain area maintenance team	

Using findings from OSH inspections with photos of safety issues supports training by showing real-world risks from the employee's actual workplace.

### Conclusion

OSH professionals have access to many training tools and resources. However, the most valuable tool are the employees who bring with them hands-on experience and a desire to learn. As Benjamin Franklin said, "Tell me and I forget. Teach me and I remember. Involve me and I learn." Today's OSH trainers must involve their adult employees to improve their learning. **PS**

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