Training Transfer Strategies for the
Safety Professional

By DAVID L. MACHLES

The amount of time and money being spent on training is astounding. According to a study by Carnavale and Gainer, an estimated $50 billion is spent annually on formal training, with an additional $90 to $120 billion on less-structured, informal training (Broad and Newstrom 5). Safety training is high on the list of programs being provided. According to a 1999 survey by *Training* magazine, 77 percent of respondents offer safety training to employees, leading it to rank seventh among 30 programs offered.

While this may seem impressive, estimates suggest that only 10 to 15 percent of training content is retained after one year (Broad and Newstrom 7). With such a poor return on investment, it is no surprise that management often witholds support for more training. If safety professionals could demonstrate the effectiveness of training, it would be easier to justify its importance to management.

Most safety professionals have delivered training only to see employees regress to old practices once back in the workplace or roll their eyes when shown the safe way to perform a given task. While these behaviors likely occur in response to all types of training, they are seen frequently by safety professionals because safety training is typically offered annually, is required and is often viewed as a hindrance to production by managers and employees alike.

In addition, many companies believe—incorrectly—that compliance is achieved once "required" training is completed and documented. Whether any learning actually occurs is irrelevant. However, since OSHA will likely develop more performance-based standards in the future, compliance will no longer be defined by names on a roster; rather, the employee's actual knowledge and actions will demonstrate the results of training. Presently, a major criterion for participating in OSHA's Voluntary Protection Programs (VPP) is ascertaining employees' on-the-job knowledge. The agency's VPP teams often spend considerable time speaking with employees to determine their knowledge level.

How can safety professionals help employees incorporate training into their work? How can safety professionals help management and employers cost-effectively comply with performance-based standards?

TRAINING OBJECTIVES & EVALUATION

To ensure success, the need for training must be clearly identified. This can be achieved via a needs assessment. A thorough assessment will also identify non-training issues that should be addressed before training is initiated.

Once needs are identified, clear objectives must be developed. These describe what the learner will do; state the conditions under which they will do it; and establish criteria by which successful performance will be judged (Molenda, et al).

Training objectives are often written for performance in the classroom. Ideally, they should address the performance expected in the workplace. Certainly, this will be more difficult for the trainer to control and may take more effort than a more-generic objective (e.g., participants will score 80 percent or better on an end-of-class test).

Regardless of objectives developed, the evaluation method must address them directly. In addition, the evaluation must go beyond the typical form used to assess trainee perceptions of the class. Those that measure workplace performance or provide information that shows a reduction in accidents or injuries gives the safety professional and management more valuable information (Phillips).

In addition to clear objectives and evaluation, instructional design should include transfer strategies. Training transfer is the process of successfully moving knowledge, skills or attitudes from classroom to workplace—which is the ultimate goal of training. Adult educators have struggled with this issue for some time, prompting researchers to explore ways to diagnose problems concerning learning transfer systems (Holton, et al 333+). Understanding barriers to training transfer, as well as those factors that facilitate it, will increase the effectiveness of safety training.

BARRIERS TO TRAINING TRANSFER

Barriers are factors that inhibit training transfer. Common barriers include lack of reinforcement on the job; interference from the immediate environment; a nonsupportive organizational culture or climate; and the employee's view that training is impractical or irrelevant (Broad and Newstrom). Lack of management intervention and involvement is a common link between these problems.

Inconsistencies in the workplace can create barriers as well. For example, if safety is touted as the most-important aspect of the job ("safety first"), yet employees and supervisors are rewarded for the quantity of product moved out the door—perhaps at the expense of safety—management is sending a mixed message.

Lack of technology or equipment to support training creates yet another barrier. If special equipment is used during training, yet is not available on the shop floor, skills learned will not readily transfer.

Coworkers—through attitudes and behaviors that do not support training—can also present a barrier. Similar to work environment inconsistencies, peer pressure and unsupportive coworkers will quickly erode the ideas and skills taught during safety training.

As noted, training transfer is often inhibited by lack of management commitment and involvement. However, when these elements are present, they are among the greatest enablers of transfer. According to a study by Dixon, training goals set by top-level management have a huge impact on trainee motivation (Baldwin, et al 26). A 1955 study found that participants showed the desired results of training when their supervisors consistently demonstrated the principles and techniques (Broad and Newstrom 7).

Although lack of commitment can be prevalent, in some cases, lack of management understanding may be the true problem. For example, perhaps managers do not fully realize the importance of their support. Many may simply assume that if training is provided, the new skills will automatically carry over into the workplace; they may not realize that applying new knowledge and skills takes time and effort.

In other cases, managers may not have the knowledge to support the information employees have learned. For example, if an employee wears a respirator for a specific task but the supervisor has never worn one or attended respiratory protection training, then the supervisor might not fully understand the issues involved. S/he may understand that an employee must be medically approved and fit tested, and must attend annual training, yet s/he may not appreciate the importance of these requirements. Without the benefit of experience and training, the supervisor simply may not comprehend the dangers of not performing the fit test each time a respirator is used nor the hazards associated with an improperly stored and maintained device. How likely is this manager to enforce—or even encourage—an employee to follow all requirements?

According to Baldwin and Magjuka, employees easily perceive a difference between management permission to perform certain skills and management support for those skills (Baldwin, et al 28). Consequently, given the newness of the employee's skill and knowledge and the lack of support for those skills, one can see why any transfer may be impeded.

How can safety professionals gain management support for training? Several effective strategies can be employed—and most require minimal effort.

TRANSFER STRATEGIES

Transfer strategies can be classified as those involving managers, trainers and employees and those implemented before, during and after training (Broad and Newstrom). Trainers can use various approaches to strengthen management support. Returning to the respirator example, orienting the supervisor about his/her responsibilities and the expectations of training will clarify the importance of his/her role. Even better, ask the manager to attend a training session. This will increase the supervisor's knowledge and demonstrate commitment to the program.

Another effective strategy is to involve supervisors and employees in the training needs assessment. By including these key stakeholders, all involved better understand program content and its application to the workplace. People tend to support what they help build—and training programs are no exception. If a supervisor is not involved in the needs assessment, s/he should at least review course content and materials. At this time, the trainer should also explain that coaching an employee after training will also strengthen training transfer.

Assigning precourse work—and ensuring that the supervisor provides time for employees to complete it—is another strategy. These exercises allow trainees to preview material and gives them an opportunity to identify how and when training will be used. By allowing employees the time to complete these assignments, the supervisor sends the message that training is important.

In addition, the trainer should contact all supervisors and ask that they encourage employees to attend. Employees need to hear from management that attendance is mandatory. In addition, employees must understand that they are expected to report back to their managers what was learned. Managers should also be asked to prevent interruptions, action which further demonstrates that training is important.

Supervisors can also facilitate the transfer process by shifting trainees' work to other employees. This prevents trainees from facing a backlog of work upon their return and allows them to focus on training. When faced with the added workload upon their return, employees may simply revert to old habits rather than attempt to incorporate new skills.

It is also important to recognize employee participation during department meetings. Supervisors can ask trainees to share what was learned and how it applies to the work setting. This further reinforces the importance of training. Supervisors should also be asked to facilitate the use of new skills by providing employees time to practice them.

Transfer strategies should be developed for trainees as well. As noted, it is best to involve employees in program planning and development and provide them with precourse work. It can also be beneficial to have employees develop a plan to apply the skills once they return to work. This can take the form of a learning contract between trainer, trainee and supervisor; this document should outline training expectations and define the responsibilities of all involved. However, this is an involved process and may be difficult to initiate; in such cases, a simple discussion with the trainee can accomplish similar outcomes.

Supervisor and employee transfer strategies are often complementary. In essence, the purpose of transfer planning is to develop a system that gets all stakeholders working together instead of training being developed and delivered in a vacuum. Many safety professionals currently employ these strategies to varying degrees. What is typically lacking, however, is an organized, systematic approach to their application.

Tips for Increasing Training Transfer

• Use realistic examples of how the skill might be used.

• Give learners meaningful contexts for the application of concepts rather than presenting theory without useful association.

• Use rich analogies to heighten retention of information.

• Present skills in a conceptual context before asking learners to use them.

• Include practice of skills in the design of the learning event.

• Present new concepts in several different ways.

• Use clear and effective visual aids.

• Consider the use of pretraining assignments.

• Keep concepts and skills as close as possible to the work generally performed by participants.

• Build in post-training follow up with participants.

• Encourage the organization to develop supportive environments for continued learning in the workplace after training has taken place.

Source: Caravaglia, P. "How To Ensure the Transfer of Training." *Training and Development.* Oct. 1993: 63-68.

DEVELOPING A PLAN

To develop a comprehensive plan, one must consider the type of training and its application. Variables that affect transfer strategies include the frequency with which skills will be used, the type of training and the difficulty of applying new skills. For example, training an employee who will operate a forklift daily requires a different set of strategies than will training CPR to a person who will rarely use the skills.

It is best to limit the number of strategies—generally to two or three—initially incorporated into the program. As with any new skill, it is also important to set realistic goals. If supervisors are not accustomed to being asked to support the training, shift workloads to accommodate training and prevent interruptions, it may take some time to develop these habits. The best rule of thumb is to be patient; those involved will eventually learn to incorporate these new strategies—and new ones can be added as they become more comfortable.

CONCLUSION

Many safety professionals recognize that much of the control wielded during a training session is surrendered as soon as participants leave the room. Understanding barriers and enablers to training transfer allows trainers to employ strategies to facilitate the transfer process.

In a perfect world, training would be delivered, participants would become enlightened and, as they utilize their new skills, they would move to a higher level of safety and productivity. In reality, this is rare. Employees confront barriers as soon as they leave the classroom—even some that begin in the classroom. Furthermore, employees are often well aware of these barriers. This not only inhibits new behaviors, it also makes the trainer appear oblivious or insincere. In fact, providing information that is inconsistent with information depicted in the organization creates a dissonance that may actually undermine training.

The ultimate goal of training is employee understanding and the ability to apply knowledge learned on the job—to transfer training from concept to practice. So, the next time a supervisor knocks on the door and says he needs a trainee for about 30 minutes, ask yourself, "Who is to blame for not recognizing the importance of the program?" Is it the supervisor for interrupting or the trainer for not explaining the importance of not interrupting to the supervisor? ■

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David L. Machles, M.P.H., COHN-S, is a health and safety coach with Dimensions in Occupational Health and Safety, Research Triangle Park, NC, where he conducts worksite needs analyses, develops safety and health policies and procedures, and conducts safety training. He holds a B.S. in Nursing from the University of Akron, and an M.P.H. from the University of North Carolina, Chapel Hill, and is a doctoral student in adult education at North Carolina State University. Machles is a professional member of ASSE's North Carolina Chapter.

Effective Training Objectives

Effective training objectives contain three distinct parts: observable action, measurable criteria and conditions under which the objective is measured.

Part 1: Observable Action
An objective must contain a verb that describes the desired behavior or performance. For example, "change a sparkplug" and "thread a pipe" are statements that specify one behavior that is to be exhibited by the trainee. To be most effective, each objective should specify only one behavior/expected performance.

Part 2: Measurable Criteria
The training objective must indicate not only what behaviors will be exhibited, but also the quality of those behaviors. In other words, the objectives must state what level of performance is acceptable or constitutes a "passing grade" on those objectives. For example, "Make a California roll to the trainer's satisfaction" is an objective that provides criteria for the measurement of successful completion.

Part 3: Conditions Under Which the Objective is Measured
To clarify exactly what the trainee is expected to perform, the objective must state what tools, procedures, materials, aids or facilities are to be used.

Sample Action Words for Objectives

asks	describes	illustrates	operates	reproduces
assembles	designs	initiates	organizes	selects
calibrates	diagrams	integrates	outlines	separates
categorizes	discriminates	interprets	performs	solves
changes	dismantles	justifies	practices	states
creates	distinguishes	labels	prepares	summarizes
converts	estimates	lists	presents	supports
composes	explains	manipulates	proposes	uses
defends	fastens	matches	qualifies	
defines	grinds	measures	questions	
demonstrates	identifies	names	reconstructs	

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