

Safety Training or Safety Education?

When I teach a university class it's considered "education" -- even "higher education," but when I teach for industry, the activity is commonly referred to as "training." Colleges and universities have "Centers for Educational Excellence," Industries have "Training Centers." Thus, it seems that colleges and universities **educate**, and industries **train**.

And, what about elementary schools? Do we say children receive education or training in our public schools? Education rather than training is clearly the more commonly stated purpose of public schools, even when particular technical skills are taught. Thus, when high-school students receive specialized instruction in a particular technology, we claim they receive "vocational education," not "vocational training." Training supposedly occurs after public education, when an individual enters the job market.

So What's the Difference?

Is there a meaningful difference between education and training, or can we use these terms interchangeably? Obviously, we do use these terms interchangeably, as if they have the same meaning. But if you think about it, these terms are not the same. Each should implicate a different teaching style and a different purpose. Some situations require education, others call for training, and some need both education and training. As safety teachers we need to know when to educate, when to train, and when to do both. This is the issue we'll explore here.

First, let's understand the difference between education and training. Actually, you already know the difference. What do you want for your teenager in public school --

sex education or sex training? In contrast, are you satisfied with your teenager receiving only “driver education,” or would you prefer some “training” with that education?

Misuse of Terms

Because people know intuitively the difference between education and training, misusing these terms can have unfortunate psychological effects. Safety training, for example, can come across as a step-by-step procedure or program with no room for individual creativity, ownership, or empowerment. This can lead to the perception of safety as a top-down “flavor of the month.” Thus, when people are not educated with regard to the principles or rationale behind a particular safety policy, program or process, they might participate only minimally. They will perceive the program as a requirement rather than an opportunity to make a difference. They might even see themselves as animals in a “circus,” well trained to jump through hoops, rather than as members of a safety community, empowered to go beyond the call of duty for safety.

By the same token, safety education without follow-up training will not reap optimal benefits. Learning the theory or principles behind an intervention approach is crucial for customizing intervention procedures for a particular work situation. But after the procedures are developed, optimally with input from an educated work team, training is necessary. People need to know precisely what to do in order to carry out a set of program procedures. With proper education, these participants can refine or upgrade procedures when appropriate. And with a change in procedures, additional training is obviously needed.

Different Techniques

Teaching is different for education versus training. When I lecture to large groups of university students or to safety professionals and hourly workers, I use a variety of techniques in order to attempt to maintain attention and get participants involved in the learning process. I might use brightly colored overheads, write statements on a blackboard or flipchart, make an extreme statement to elicit contrary reaction, or ask pointed questions and solicit answers from the audience. My purpose is to influence the participants' cognitive or thinking processes. From a practical perspective, I want to improve their ability to improve situations or solve problems related to the subject matter. Such education might increase profound knowledge or critical thinking skills, and this could lead to behavior change. If so, I will have "thought a person into behaving differently." In other words, education targets thought processes directly, and might indirectly influence what people do.

Training targets behavior directly, and might indirectly influence thought processes. This typically calls for more than a lecture format, as described above for education. Although training might start with a specification of the steps needed to accomplish a particular task, more than this is needed to assure the learning of certain skills or procedures. Participants in a training course should practice the desired behavior and receive pertinent feedback to support what's right and correct what's wrong or could be improved. And if such feedback is given appropriately (e.g., genuinely in a trusting and caring atmosphere), behavior might not only be directly improved, but one's thinking or attitude associated with the behavior might be positive. In this case, training would perhaps "act a person into different thinking."

An Illustrative Example

My colleagues at Safety Performance Solutions use both education and training to teach effective safety coaching skills. They start with education, by teaching the basic principles behind a behavior-based approach to coaching. Then they use group exercises to implement a training process. In one small-group exercise, participants develop a brief skit to demonstrate the coaching principles they have learned. For example, one person might set the stage, another person might demonstrate safe or at-risk behavior, and a third person might give rewarding and/or corrective feedback. When a group performs their skit in front of the entire group, the translation of principle into practice can be evaluated and behavior-focused feedback offered. If given appropriately, the feedback (from the audience and the educator/trainer) will improve the performance. This can be assessed, of course, by asking the group to repeat their coaching skit.

In one variation of this training process, we have asked groups to first show us the wrong way to coach and then to demonstrate the right way. Then after the group displays their rendition of appropriate safety coaching, the audience is given an opportunity to offer supportive and corrective feedback. Usually the educator/trainer finds opportunities to add to the feedback from an observer, and often shows how the feedback from the observer could have been more constructive or useful. Such teaching is frequently accompanied with a re-statement of the underlying principle or rationale. In this way, education and training go hand-in-hand to maximize the probability that the learning process will lead to real-world advantage.

In Conclusion

I have discussed two terms used quite frequently and interchangeably--education and training. Although these terms are seemingly used quite arbitrarily when referring to teaching/learning experiences, they do reflect very different instructional procedures and expected outcomes. Most teaching of safety policies, procedures, and processes require both education and training. First, people need to understand and believe in the rationale, theory, or principles underlying a particular set of program procedures, and this is commonly referred to as education. Understanding, belief, or awareness is not sufficient, however, to implement a new procedure or process. People need to learn the specific behaviors or activities required for successful implementation of the intervention. This requires training, and should include behavior-based observation and feedback. In other words, participants need to practice the behaviors called for by the intervention process, and then receive constructive behavior-focused feedback from careful observers.

Using these terms correctly can help to straighten out the apparent confusion among safety professionals, consultants, and employees regarding differences between attitudes and behaviors, and how to improve these critical human dimensions. Attitudes, beliefs, values, intentions, and perceptions can be influenced directly through education; whereas behaviors are directly influenced through training.

Education can influence behaviors indirectly *if* the education process changes an attitude, intention, belief, or value which is perceived as linked to a certain behavior. And, training can influence attitudes, intentions, beliefs, or values indirectly *if* the behavior change is accepted by the participant and perceived as related to a particular attitude, intention, belief, or value. Research has shown that the “if” in both of these

statements can be very difficult to establish with only education or only training (as defined here). Therefore, a strategic combination of both education and training is needed if improvement in both behavior and attitude is desired.

E. Scott Geller, Ph.D. and Professor
Virginia Tech and
Safety Performance Solutions, Inc.
Blacksburg, VA 24061-0436

NOTE: Dr. Geller discusses education and training strategies for improving safety-related behaviors and attitudes in his new book "The Psychology of Safety." For more information, please call Safety Performance Solutions at (540) 951-7233 (SAFE).