Keys to Success for the "Incidental Trainer"

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Introduction

Who is an "incidental trainer?" The term "incidental trainer" refers to a professional who has training as an incidental, not a primary, responsibility in a job or business. Many SH&E professionals and consultants are incidental trainers. They are subject matter experts in various aspects of work place safety. As a result, it is often assumed that they can train others on these matters. It is unusual to find a safety manager who does not conduct some safety training. Yet, do all safety managers have the education or experience in instructional technology or adult education to be an effective trainer? Unfortunately the answer is no, which means that in spite of their technical expertise these incidental trainers are unable to transfer knowledge or skills to the trainees or the trainees do not retain what they have learned soon after the training event is over. Consequently the desired job performance or regulatory compliance is not achieved.

How can an effective SH&E professional be also an effective trainer? This paper will discuss the keys to the successful design, development, and delivery of highly effective training programs, applying the principles of adult learning and the guidelines in the American National Standard ANSI/ASSE Z490.1: Criteria for Accepted Practices in Safety, Health and Environmental Training.

#1 Key to Success: Needs Analysis

When employees are not meeting performance expectations or are violating safety rules, the immediate assumption is that they need more training. In reality training is not a panacea. The cause of the problem could be organizational or systemic, for example, resistance of the purchasing department to substitute a hazardous material with a less toxic material due to cost.

The goals of a training needs analysis are to find out:

- What employees know and what they should know
- How employees perform and how they should perform
- Why a discrepancy exists between the desired and actual results
- Whether and how training can correct that discrepancy

The process of training needs analysis may involve one or more of the following steps depending on the nature of the job and the industry.

Tour Facility

The physical work environment has tremendous influence on productivity and creativity. A trainer may want to look at the work area and ask questions such as these:

- Is there adequate and appropriate lighting for the task at hand?
- Does background noise cause distraction?
- Are temperature and humidity properly controlled?
- Do the employees have the supplies or equipment they need to do the job?
- Are there any health or safety hazards?

Interview Personnel or Conduct Survey

The person conducting the training needs analysis should keep an open mind and remain as objective as possible. Include frontline employees, supervisors, and management to get their perspectives on aspects of the jobs, including the physical environment and job requirements.

Ask questions about the job tasks rather than training needs to discover the real challenge. A job task question may be, "What steps do you take when there is a chemical spill?" In contrast, a training needs question may ask, "Have you attended any training class in spill control?" Having attended training does not guarantee that the employee has learned or can apply what has been taught in that class.

Research Regulatory Requirements and Internal Policies

Is there any discrepancy between regulatory requirements, internal polices, and what the employees are actually doing? Regulatory requirements applicable to the organization or the job will take precedence over internal policies. In case of any conflict, the policies must be corrected. If deviations from policies are observed, the reason should be investigated. A valid reason justifies updating the policies, whereas an invalid reason demonstrates the need for training.

Determine Root Causes and Desired Remedial Actions

Analyzing data collected in the previous steps should reveal the root causes of the gap between desired and actual performance. Suitable remedial actions may or may not include training—the purpose of this whole exercise is to find out if a training need exists. All stakeholders concerned should agree on the remedial actions. They should understand what training will do and what it will not do to achieve the performance goals. If the consensus is that training will be beneficial, the trainer will need to obtain more information to plan an effective training program.

Characterize Training Audience

Identify the potential trainees by asking these questions:

- Who should be trained?
- What is their job function?
- Are they new or existing employees?
- What are their education level, age range, and gender mix?
- Does the group include employees who do not understand English very well?
- Do they work shifts? What is the best time to do the training?
- Does anyone need special accommodation due to disabilities?

Review Job Analysis and Training Record

A job analysis is usually available from the human resource department. It specifies the knowledge, skills, abilities, and other characteristics (KSAOs) necessary to perform the job and

the level of competence required. It helps the trainer understand the job requirements and the disparity between those requirements and the job incumbent's KSAOs.

Previous training record shows what the employees were taught and how they were taught. If the employees were trained on the same topic and still lack the requisite KSAOs, find out why. It is possible that the earlier training strategies were ineffective, in which case this time the trainer should devise different strategies. For instance, if the last training comprised lecture only, the trainer may want to change the format to a combination of lecture and group activity.

Decide Training Requirements

The training requirements decided at this stage are broad. For example, the trainer and other stakeholders may agree that certain employees should be more proficient in computer skills to cope with the workflow in the department, but it has not been determined exactly what they must learn and how they will learn it. That will be resolved after a task analysis.

Task Analysis

A task analysis is a process whereby the trainer examines a work activity in order to define what he or she wants the trainees to learn. The goals of a task analysis are to determine:

- What needs to be taught
- How it should be taught
- What the criteria of successful learning are

Many methods of task analysis are available. Selection of the best method depends on the training goals and the nature of the job. An incidental trainer does not have the time or resources to research or apply complex methods. One method that is easy to use and can be employed in many job situations is a technique derived from procedural task analysis, using one or more of the following steps.

- **Identify prerequisites**: What are the KSAOs for the job? Do the trainees possess those KSAOs?

- **Review standard operating procedures:** They provide a starting point to help the trainer understand the steps in a task.

- **Record equipment used and read manufacturer's instructions:** If employees or supervisors have modified the procedures specified in a manual, the manufacturer should be consulted first before teaching new operators of the equipment to do things differently.

- **Perform or observe someone perform the task:** Video recording is helpful; ensure that legal ramifications are considered and requisite releases are obtained from people and property owners.

- *List all steps in the procedure*: Whether sub-tasks should be listed in a task analysis depends on the complexity of the task and the knowledge level of the trainees.

- **Validate the task inventory**: A job incumbent other than the person who performed the task during the analysis would be an ideal person to verify the list.

- **Compare actual performance with standard**: Deviations may occur in many dimensions, such as timeliness, quality, and quantity. They are noted so they can be corrected in the training.

Having performed the needs analysis, the incidental trainer is equipped with the information necessary to develop the lesson plan.

#2 Key to Success: Lesson Plan

In everything a person does professionally and personally, the individual should know what his or her aims are and how he or she plans to achieve them in order to succeed. A training plan is like the blueprints in a construction project or the navigation charts for a ship's voyage. It is a basic tool used to ensure that the training goals will be met. This may sound fundamental, but it is amazing how frequently incidental trainers do not prepare a lesson plan.

What should a lesson plan include? The major sections are described below.

Learning Objectives

Writing learning objectives is one of the most challenging tasks for many incidental trainers. That is because most incidental trainers lack a good understanding of the domains of learning. Additionally, incidental trainers tend to write learning objectives from the standpoint of what they want to accomplish, rather than what their trainees should achieve.

The learning objectives should define:

- Who the trainees are
- What skill or behavior will be taught
- What the trainees will be able to do or how they are expected to behave after the training, including the conditions under which performance will be evaluated

Instructional Strategies

How should the training be conducted to promote maximum retention? The choices are plenty and many can be used in face-to-face as well as virtual training. Some common examples are:

- On-the-job training
- Lecture and panel discussion
- Guided discussion
- Demonstration and practice
- Role-play
- Participant discovery
- Collaborative learning

The most suitable strategies depend on the learning objectives, the trainees, situational constraints, and sometimes the skill level of the trainer. For example, a lecture may be suitable when the learning objective is for the trainees to know certain safety rules, such as why hearing protection is required in the generator room. If the learning objective is at the application level, demonstration and practice would be necessary to ensure that the trainees will insert earplugs correctly. A combination of more than one strategy usually works best.

Training Aids and Equipment

Training aids can be used not only to demonstrate procedures but also to maintain audience interest. People learn and remember better when the course materials are both educational and entertaining. Many tools are available and the selection should again be based on the learning objectives, which would include consideration of the trainees. Advanced technology has tremendously increased the possibilities; however, a trainer also must take into account the skill level of the trainees in using the technology and their access to the technology. A webinar may be

an excellent way to train corporate safety personnel around the globe but not agricultural field workers in remote parts of the world. Other considerations are cost and portability.

Some ideas for training aids and equipment are:

- Handout
- Slide presentation
- Video/audio DVD/CD
- Easel pad, dry erase board, electronic copyboard
- Model, prop
- Costume
- Game
- Computer, Internet, simulator

Physical Environment

Portability brings us to the aspect of physical environment. The basic principles to adhere to are that the physical environment should facilitate learning, should allow trainees to see and hear all the training and participate in the activities, and should be safe, especially if demonstration and practice are involved. Safety trainers certainly do not want to have a safety incident when conducting training!

In managing the physical environment, consider these factors:

- Room layout and seating
- Lighting and noise
- Climatic conditions
- Water and sanitation
- Safety and evacuation route
- Equipment and supply

Whenever possible, advance site inspection is highly recommended. Even if the site is as simple as a conference room, checking it out beforehand gives the trainer an opportunity to ensure that all equipment such as projector is in good working order and placed in the desired location.

Testing and Assessment

It is remarkable how often training is completed without assessing whether the learning objectives have been met. Some say that as much as 85% of all training does not incorporate any form of testing. The purpose of training is to transfer knowledge, teach skills, or change behavior or attitude. Without testing and assessment, how do the trainer and trainees know if the purpose is achieved?

There are many testing techniques. As always, the selection of a testing method should be based, first and foremost, on its suitability for the learning objectives. Another important element is the reliability and validity, which ensue not from the method per se but from how it is designed and used. Many SH&E trainers would be familiar with some of these methods as they are used in college and professional certification exams. With today's Web conferencing capability and learning management software, the following methods are suitable for classroom and virtual training:

- Multiple choice, multiple select, true/false, matching, or ordering
- Fill-in-the-blank or short answer
- Essay or oral explanation
- Case study or situational judgment testing
- Performance or simulation
- Role-play
- Observation or report

Course Evaluation

Course evaluation is used to evaluate course contents and effectiveness of the trainer. It is the critical feedback that enables continuous improvement in content and delivery.

The most common type of evaluation is the participant survey completed by trainees soon after the training. Good survey design takes advantage of specialized knowledge and skills in research methods. A few useful guidelines are to (a) include both closed-ended questions (e.g., rating scales or questions leading to yes/no answers) and open-ended questions with spaces for write-in comments, (b) avoid loaded questions that contain presumptions, and (c) provide a space for the participant to include his or her name, if desired, so that the individual may be contacted for clarification of his or her responses. A form that is easy to fill out tends to have a higher response rate than one that is time-consuming to complete. Most course evaluation data are collected soon after the training course while memories are fresh. Occasionally a follow-up survey is performed three to six months later to determine if trainees are applying what they have learned. Follow-up studies are more commonly used for validating program success.

#3 Key to Success: Presentation and Facilitation

The best lesson plan is useless if it stays in a computer or drawer. When presenting course content to trainees, an enthusiastic and engaging trainer maintains trainee attention, resulting in a better learning experience and longer retention. Having said that, a trainer must remember that training is not public speaking. Training should be a process that facilitates learning and should be focused on the learning objectives. It should be trainee-centered. However, presentation and facilitation have common elements that promote successful outcome.

Preparation

Abraham Lincoln once said, "If I had eight hours to cut down a tree, I'd spend six hours sharpening the axe." The good news is that if a trainer had taken the steps of performing a needs analysis and developing a lesson plan, much of the preparatory work is done. Still, it is necessary to plan the actual training event, which includes organizing course materials into a logical flow and delivering those materials.

Organization

Every presentation has three parts: opening, body, and conclusion.

The opening should grab the audience by asking a startling question, telling a poignant story, citing an interesting quotation, or showing a dramatic object. Needless to say, anything done should be relevant to the training message. The opening should also state why the training is important to the trainees.

Different organizing patterns are used for the body. For example, the materials may be presented in chronological order or by topic. Using comparisons can be informative and persuasive, as when comparing the investment in an ergonomics program versus the cost of one

workers compensation claim for work-related musculoskeletal disorder. A cause-effect pattern can illustrate the consequence of non-compliance with safety rules. A problem-solution pattern is appropriate for building problem-solving skills.

The conclusion reviews and summarizes what has been taught and how it has met the learning objectives. It is also a final opportunity the trainer has to persuade, convince, and motivate the trainees to practice what they have learned, change their behavior, or improve their job performance. An attention-grabbing conclusion complements an attention-grabbing opening. For instance, rather than administering a formal test, a game activity that tests skills acquired and is fun may be advantageous.

<u>Delivery</u>
Although training is not public speaking, when it comes to delivery some characteristics of outstanding speakers also apply to outstanding trainers.

- **Introduction**: Whether a moderator will introduce the trainer or the trainer will self-introduce, let the trainees know why this trainer is qualified to present training on this topic.

- **Appearance:** First impression counts. Be confident and dress appropriately for the training topic and audience.

- **Voice:** A monotone puts trainees to sleep or encourages them to play with their mobile electronic devices. Varying volume, rhythm, and intonation enhances the message.

- **Language:** Clear, concise sentences are easy to understand. Unprofessional language is unacceptable even if the same words may be spoken by trainees working in the field.

- **Gesture:** Appropriate use of body movement, hand gesture, and facial expression enhances the message; be sure that they are not distracting.

- **Facilitation**: The ability to motivate trainees to participate in discussions and activities, to draw out questions from those who do not understand something but would not ask, and to respond to questions effectively is what distinguishes a speaker from a trainer.

The critical success factor for effective delivery: Practice makes perfect!

Conclusion

To be effective, training should be conducted by skilled trainers. By acquiring those skills through learning and practice, incidental trainers can be as effective as full-time, professional trainers. Obviously this paper has only scratched the surface of this topic. Using the keys to success presented will be a first step for incidental trainers to enhance proficiency.

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