

PRACTICAL TRAINING OVERVIEW FOR THE CONSTRUCTION INDUSTRY

Gone are the days when an employee showed up for the first day of work with a box full of tools and a wealth of experience and could be assigned a task and expected to complete it in a skillful manner. Ideally, the employee never got hurt, always showed up on time, needed little supervision, and never complained. Perhaps the “model employee” in the example never really existed, but it illustrates a point. The modern construction company is faced with the challenge of finding, training, and retaining qualified employees. Great employees often don’t walk in the door looking for a job—good people walk in the door and good companies train them to be great employees.

To determine the areas in which an employee needs training, the Safety Policy or Job Hazard Analysis needs to be reviewed. For example, if an employee is assigned to paint a wall from a scaffold, that employee would need to be trained how to work on scaffolds; possibly how to erect scaffolds; how to identify hazardous chemicals, such as paint and cleaners; how to use personal protective equipment, such as safety glasses and respirators; and how to operate the equipment used to apply the paint. To cover every possible area of training that a construction company may encounter in this article is impractical, but topics for all construction companies to consider include:

- Fall Protection
- Scaffolding
- Ladders/Stairs
- Electrical
- Mechanical Equipment (for example, loaders and forklifts)
- Health Hazards in Construction (for example, lead, silica, asbestos, and carbon monoxide)
- Personal Protective Equipment
- Hazard Communication (chemical safety)
- Fire Protection and Prevention

The environment in which training is conducted is an important consideration. Not all companies have the budget to afford a top-notch training room with audiovisual equipment, comfortable chairs, and a temperature-controlled space. The basics to providing a positive training environment are to make sure employees are comfortable and to understand their needs. Standing around a job site listening to a presentation may be acceptable for a 15-minute meeting but may not be appropriate for an 8-hour training session. If the amenities of the environment are less than desirable, more frequent breaks may be required to keep attention levels optimal.

Distractions in the training environment can degrade the effectiveness of the training. In many small businesses, the training room may also serve another purpose. Training in a file room isn’t bad; however, training in a file room that has a constant flow of people in and out to retrieve files *is* bad.

The method in which the information is delivered is of the utmost importance. A variety of methods can be used to convey information, including using visual or aural materials; reading out loud; presenting written materials and/or case studies;

working as an individual or group; and participating in pre-program and post-program testing, games, competitions, and hands-on practical training. Individually, all of them are effective to some degree—together, they make a powerful training tool called “Active Learning Theory” (ALT). ALT suggests we learn:

- 10% of what we read;
- 20% of what we hear;
- 30% of what we see;
- 50% of what we see and hear;
- 70% of what we say; and
- 90% of what we say and do.

The 90% rule above illustrates why teachers have pupils read out loud or study in groups. Many people learn what they do, not what they are taught.

An organization’s training program must be tailored to the people who are employed. If the workforce speaks a language other than English, then the training should be conducted in a language they understand. The employees’ level of education should also be considered. A person may speak a language but not read or write it. Illiteracy is not as prevalent as it once was; however, it is still a training obstacle that a construction company should consider.

A training session can be conducted by any employee in the company, provided they are willing, knowledgeable about the subject, and capable of conveying the message to the trainees. The training can be provided by a project manager, safety manager, or superintendent. The safety manager always seems to be the first, but not always the most prudent, choice. Training by outside sources such as vendors, suppliers, or paid consultants should also be considered. Professionals may be available who possess a broad range of knowledge about the training subject matter.

The final things to consider regarding employee retention of material are: 1) when the training session is; and 2) how long the session will last. If a company is operating on a standard 5-day work week (Monday through Friday), the best days to train to ensure the highest possible level of information retention are Tuesday, Wednesday, and Thursday. To determine how long to train is more a matter of determining a trainee’s attention span. An assistant project manager who has graduated from college may be able to tolerate a longer classroom training session than a 30-year veteran field technician.

Overall, training is not a daunting task if approached methodically. The program must be tailored to the organization’s needs and the employee’s characteristics. If proper amounts of time and effort are spent training employees to prevent accidents and injuries, there can be reduced cleanup, repair, insurance, and workers’ compensation costs.

Charles J. Brienza is a Construction Health and Safety Technician (CHST) Safety Director with Concrete Protection and Restoration, Inc.