

# The Training Dilemma for Construction

## *The Case for Involving Workers in the Safety Management Process... A Productivity Dividend*

by Philip L. Colleran, CSP

Every year, 200,000 workers must replace those who have retired from construction or left it for other reasons. The pool of skilled tradespersons in construction is shrinking as the number of young people entering the industry has reached a staggering low. According to the Business Roundtable, a group of 200 top construction users, “Craft manpower availability and training remains the top problem for the nation’s largest owners”. The Construction Financial Management Association echoes that thinking: “It’s the number one worry of construction firms for the next five years.”

It’s also no secret. The construction industry is clearly at a crossroads. A business that can only offer opportunities that ebb and flow with the nation’s business cycle and gets trapped into believing that to be competitive, its workers must remain an expendable commodity, is challenged to re-examine the investments it makes in both livelihoods and lives. Regardless of what’s made the industry a less than attractive career choice, the very real problem of training a here-today-gone-tomorrow work force in hazard recognition continues.

How does the industry’s training dilemma factor into worker safety?

Simply put, fewer skilled tradespersons means fewer people with a capacity to recognize and deal with hazards. If one fairly basic (and constant) statistic is to be believed, nearly 90% of all construction injuries are caused by unsafe acts. If you’ve moved beyond the ice age mentality that chalks a majority of accidents up to “carelessness” and begun to look for root causes, you’ve discovered a majority of unsafe acts occur not out of carelessness but because of inadequate training or poorly communicated and enforced work rules. Yet many employers’ First Reports of Injury continue to contain statements such as: “Worker was not watching what he was doing”. As an industry and as individual employers, we have failed to capitalize on the experiences of many workers who’ve seen first hand what’s worked and what hasn’t, and set the tone for new workers that short-cuts aren’t doing anyone a favor. Still others among us believe industry customs and practices equate to the way we’ve done something in the past, and that we cannot change.

### **The construction employer’s dilemma...**

Start with a basic training requirement that OSHA places on every construction employer:

*“The employer shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury” {Title 29 CFR, Part 1926.21 (b)(2)}*

OSHA and the Occupational Safety and Health Review Commission have done little to assist the construction industry in its challenge to understand what constitutes an acceptable level of training. Much of the case law on training issues arises from unprogrammed inspections (complaint, referral and accident investigations) in which the general training requirement was cited because of an unsafe act on the part of an employee or a paucity of standards to address many sources of injury. The weekly safety “chat” has evolved from the construction industry itself. The OSH Review Commission has essentially gone along

with it. In the main, the Commission's administrative law judges have vacated many .21(b)(2) citations on the sole basis that respondents were holding such meetings, with little evidence as to substance.

A review of OSHA's regularly updated booklet Training Requirements of the Occupational Safety and Health Administration reveals only a compilation of the requirements themselves and little insight on what constitutes compliance.

Many standard-specific training requirements have emerged since the basic training requirement was promulgated in 1972, among them hazard communication, excavation, fall protection, scaffold safety, and lead, each with increasing particularity as to the nature and extent of the training, many requiring attendant documentation. Thousands of citations for lack of training in hazards addressed by specific standards, e.g. Hazard Communication, issued by the Agency during the mid eighties and early nineties achieved little else than alienating an industry which until then had grown complacent with the belief that compliance with training requirements meant "weekly toolbox safety talks", showing videos, or handing out material safety data sheets. Can any individual employer, large or small, who hires hourly workers often for only short duration, hope to provide the level of training actually required by such regulations?

*"I pay these guys more than twenty dollars an hour, plus benefits. For that kind of money, I expect them to show up fully trained and ready to work!"*

If life were that simple. Because the construction industry's work force is transient, workers show up with all kinds of safety training and safety baggage, both good and bad. One person comes to the trailer with an OSHA 10 hour card issued in 1976. Another spent the last three seasons working pavement construction and now, because she's a general laborer, is expected to erect frame scaffolding. Still another comes from the hiring hall, his last stint on a downtown high rise; now he's working at a coke battery. What do these workers know about your project? What hazard-specific safety training have they had that applies to your company's type of work? How will you let them know about unexpected hazards that present themselves during the course of their work? Most important, what is your method of getting information from them about hazards they see on your project? Is it possible they know a more cost-effective method of dealing with a particular hazard from their experiences on other projects?

### **More than one kind of training...**

There are really four kinds of training that serve to comply with OSHA and, more important, enable contractors to deal with unsafe acts:

- Formal/Standard-specific training;
- Project-specific orientation;
- Safety meetings; and
- Daily pre-shift safety meetings.

### **Formal/Standard-specific training**

If every construction worker remained at his or her job long enough to make formalized classroom training a viable and economical option for the individual construction employer, our industry would be out of the woods overnight. While more and more construction firms are beginning to develop core groups of supervisors they try to keep in their employ, even during lean periods, the sad fact is that because of the nature of our business, even field superintendents and general foreman are commodities. They "go on down the road" when a project or group of projects is completed. This itinerancy discourages progressive thinking that workers are assets and interrupts both the continuity and quality of training they do receive, whether it be in safety or any other kind of professional development.

Is it realistic to expect that a contractor, who employs workers for only a finite period of time, provide all of the required basic and standard-specific safety and health training? A person who fully appreciates the economic burdens implied would say no. And yet the construction employer's responsibility under OSHA for training remains just that. Perhaps a more reasonable approach is to recognize that training can pass among employers, but that it must be quality training and that the employer still plays a vital role. The employer must ensure it has been provided, and must supplement it with project-specific hazard information.

In an ideal world, safety and health training would be progressive like most structured curricula. Workers would certainly receive the basic ten or thirty hour hazard recognition course as part of an apprenticeship. Journeymen would return for periodic updates and supplemental training. Workers would carry a swipe card that would indicate their levels and currency of training. Certain specialized types of training would qualify them for certain kinds of duties. For example, a worker who has demonstrated proficiency in the use of a certain type of aerial lift would be able to check out such a device and proceed to work. The employer would provide site-specific orientation and on-going training in the form of safety meetings.

In the past ten years, glimmers of such a reasonable approach have emerged in the form of industry initiatives that seek to provide construction workers with at least some basic safety training. The petrochemical industry, aware of its less than stellar performance in overseeing the work of outside contractors, began requiring any tradecraft workers coming through its gates to at least possess an OSHA 10-hour card. Now many are requiring thirty hours, comprehensive site-specific orientation, and on-going audits.

*“By some accounts, non-union contractors now perform almost 80% of U.S. construction. But for the past decade or more, that part of the industry has not universally shouldered the training obligation that goes along with the growing market share. If not for a series of economic recessions and a feast of skills available from former union workers, that sector's ever-which-way, on-the-job or not-at-all training would have strangled its ability to compete”* Engineering News Record Cover Story, February 5, 1996.

Regardless of affiliation or circumstance of employment, America's construction work force, both union and non-union, has far to go in craft training, including safety and health instruction. Recognizing the problem, initiatives by such organizations as the Construction Industry Advancement Fund, the National Center for Construction Education and Research and the Council of Owners and Construction Associates have begun to clear the way for at least some uniformity and reliability of training. At least one of the organizations proposes a national registry and identity card system that would strip away redundant paperwork and enable a construction employer or construction user to know not only a worker's level of craft training but medical conditions and other emergency information.

Still a further encouraging note is that at least the larger, experienced and knowledgeable construction users generally express a willingness to absorb the expense for such training as a distinct cost item for their projects. Who, after all, would be more concerned than owners, whose reputations, continuity of operations and legal positions are on the line whenever construction is performed on their premises?

The future for formalized/standard-specific training? Whether open shop or union, a cents-per-hour formula, paid for by contractors, collected by industry/labor affiliates, and passed on to owners above board will very probably be the long range solution. OSHA will have to re-examine its compliance programming policies in this regard as well. One statement made by the Agency in its preamble to Modifications and Amendments to the Final Rule on Hazard Communication (Hazcom) (59 FR 6126) at least alluded to the Agency's acceptance of training portability. Backpedaling after many years of enforcement policies and compliance interpretations that effectively required individual employers to

provide comprehensive Hazcom training, the Agency recognized the burden to construction and stated that industry organizations and unions could provide basic (and presumably good quality) training. Under those terms, individual employers would then be required only to ensure it was provided, and brief workers as to project-specific chemical hazards.

Joint apprenticeship instructors have become a large segment of the attendees to OSHA 500 “train the trainer” courses in the past 8-10 years. They are integrating safety training in their apprenticeship courses. Journeyman and an even larger population of experienced craft workers will require training if their skills are to remain marketable.

It is a mistake to consider language and literacy impediments to be a justification for providing no formalized system hazard training. The construction industry will face this growing problem in the next decade as well.

The real challenge for successful craft training and training portability, regardless of subject matter, lies in the content and quality of the training, the willingness of open shop employers to adopt and contribute to some recognized training source(s) and getting journeyman and experienced craft workers back for the training they should have had from the start.

### **Orientation**

A contractor who has identified site-specific hazards and planned the manner in which they will be addressed has, in essence, performed a job hazard analysis. Such a document might be the same from job to job, based on the type and complexity of work being performed. Certainly a patterned format for the “mainstream” hazards can be used job after job. It may be unique in only a few aspects. Regardless of its detail and what it’s called - site-specific safety plan, job hazard analysis, job safety analysis - the document shouldn’t be merely drafted prior to mobilization and submitted simply to satisfy an owner that you’ve considered all the likely hazards. It is an on-going process, subject to site observations and modified based on its degree of success in controlling the hazards. It is also based on worker input. Orientation is more than simply handing a worker a little booklet of general safety rules, issuing PPE and signing the W-4. Although most of those formalities are still a necessity, additional time spent acquainting a worker with the hazards of a particular job goes far in setting the tone for your company’s approach to safety and truly fulfills an employer’s obligation to provide instruction in the hazards applicable to the work. If a job safety plan has been developed, a copy should be given to the worker at orientation for review and input. It’s often the case that a worker’s past experiences will contribute to, improve or broaden a plan. The key is eliciting such information.

### **The Safety Meeting**

*“Yeah, yeah, just give me the sheet and let me sign it so I can get back to work”*

Some call them tool-box talks, or gang box meetings. Others call them tailgate meetings. Still others just call them safety meetings. Are they a form of training, what do they do in fostering worker involvement in safety, and are they sufficient? Traditionally, such meetings have been led by the first line supervisor, who reads a weekly subject, perhaps a “Fatalifax”, or worse, simply goes through the motions because the home office, general contractor, or owner wants to see something in writing. More typically than not, a foreman reads a few paragraphs on a safety subject (often unrelated to the work at hand), everyone signs an attendance sheet and “it’s back to work we go”.

Truly, the weekly toolbox safety talk, construction’s answer to compliance with OSHA’s general safety training requirement, has lost its importance and usefulness to both the contractor and the worker - in large part because of the way it’s conducted.

The primary function of meetings is to convey information and solve problems. In the main, a general contractor or construction manager conducts a weekly safety meeting, either separately or in conjunction with a weekly progress meeting. The subs in attendance discuss safety and health issues and carry that information back to their respective crews, who hold their own meetings.

In this day and age, even meetings of church groups seem to follow a prepared agenda, if nothing more than to let us know it's nearly over. The burden of such paperwork aside, documentation of crew meetings is every bit as important as it is for those conducted in the board room. Today's construction workers need information and the same tools to manage it if they're to be a part of the safety management process.

Anyone can run a meeting and rotating who chairs and who records it can result in greater worker involvement in and of itself. Rotating makes even more sense from the standpoint of inevitably varying attendance by workers and supervisors.

Here is a simple and useful agenda:

1. Discussion topic. A discussion topic isn't needed because the real order of business is information about the project. If you must use a discussion topic, pick one that means something to the work at hand. It might concern a new piece of equipment or chemical being brought onto the job. If you use "canned" discussion topics, don't use one every week or participants will soon begin to turn off.
2. Supervisor report(s): Just as it sounds, the supervisors report on what they've heard at the project-wide safety meeting and on their own observations from the past week. This is the time to re-state work rules that have been violated and keep everyone informed of acts and conditions caused by other contractors as well.
3. Worker's observations: A tremendous amount of collective experience is found in the crew itself. Each member potentially brings a world of experience about how hazards have been handled on other projects. Granted, some were probably handled well and others poorly. But construction is naturally innovative. A suggestion could result in a cost-cutting procedure that will save the project time and money. No matter how questionable the observation or suggestion might be, it should be recorded. Most important, a supervisor's follow-up with the worker in private some time after a meeting, if nothing more than to report his/her inability to get some action, will signal that you took their suggestion seriously. The gain? Increasing participation and a worker's genuine stake in the outcome of the project safety effort.
4. Up-coming work: Review and modify those aspects of the job safety analysis as the work proceeds. Discuss unusual or extra-hazardous operations soon to be performed and to which the crew and other contractors' crews might be exposed.
5. Accidents and Near-misses: People are naturally reticent to tell a group how they nearly killed themselves. If an accident has happened, the injured person may not be around to provide a clear picture of what really happened. Every accident or near-miss should be thoroughly investigated. Discussions of accidents or near-misses should, of course, be couched in avoiding similar events. When covering accidents, keep peoples names, medical information, and personal blame out of the discussion. Discuss causes and controls.
6. A few small details...

*"These safety meetings just turn into gripe sessions"*

Some weeks will involve longer safety meetings than others. Don't fall into the trap of making every meeting no more or no less than a certain number of minutes. Some weeks will be uneventful because little work will be under way. In those situations, some agenda items might be recorded as "not

applicable". Other weeks will be busy and you won't want to dedicate any time for a safety meeting. On those occasions the few more minutes you might spend on a particular issue will make or break a crew's impressions on whether you're serious about safety or just talking out of both sides of your mouth.

Attorney: Did you provide safety training for your crew?"

Deponent: Well... yes. We told them to be careful.

Some persons fear that making a record of the unsafe acts and conditions being observed from week to week or hazards that aren't entirely abated from week to week will come back to haunt them in law suits or form the basis for a willful citation from OSHA. Consider this: A company is required to make inspections, provide training in hazard recognition, plan hazard controls and establish and enforce safe work practices. Hazards do occur in construction because of the nature of the work. It's how they're dealt with that makes the difference. The "paper trail" a contractor develops of day-to-day hazard recognition and control is the best defense in demonstrating that hazards, whether corrected immediately as most are, or as ongoing situations requiring follow-up, are being addressed. Documentation that includes the steps being taken to keep workers safe in the interim between detection and correction is vital.

*"These workers will only be on our project for two days. Can't I simply keep a closer eye on them and avoid orientation?"*

Obviously, the degree of orientation must be appropriately matched with the scope and relative hazardousness of a project. A concrete finisher performing flatwork will probably not require the level of training in a project's lockout/tagout program as would a fitter breaking into process lines. On the other hand, general site conditions, such as emergency action, access issues, chemical hazards, etc., to which everyone is exposed, should always be covered.

### **The Daily Safety Meeting:**

Call it a huddle. Call it a five minute safety calibration. Call it the reason why workers survive myriad surprises that would be otherwise handed over by the previous shift. It's an opportunity to let people know where they can be found or to simply find out who's not feeling 100%. It is the easiest type of "training" to perform, the least economically burdensome, and involves no paperwork. The few minutes taken at the beginning of every shift seems like the sensible thing to do. Yet in the aftermath of many fatality investigations, a story of people scrambling about, frequently unaware of certain operations being performed, often unfolds. Little guidance is needed as to what should be covered at such meetings. Every crew should have one. Every crew member should attend.

### **Training America's construction worker**

An image many of us share of the construction worker is that of a resourceful individual who learns and grows, moving from project to project. It is often assumed that experience alone is the best kind of training. Can America's construction worker, faced each year with increasingly sophisticated building technologies and equipment, hope to survive without a commensurate level of hazard information? The construction industry's training dilemma challenges all of us to advance a practical and uniform framework for safety instruction everyone can live with. An industry as innovative and imaginative as construction will surely succeed.

---

Philip L. Colleran, CSP, an OSHA Compliance Officer for 17 years, is now a consultant in private practice, specializing in construction safety and health issues. He is the author of numerous articles on workplace safety and health.