Gaps in Companies HSE Onboarding Programs: Assessment and Remedy
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Abstract

With the expanding global workforce, companies are increasingly faced with misalignment between the HSE competencies acquired during the initial onboarding program for the new comers and the competencies required during the first 18 months of their assignment in the field.

Lifting, slinging and pressure handling are some of the tasks that new field personnel are required to do in their daily job assignment by new personnel. New field personnel are assisting in slinging tools and baskets without proper safety training on slinging or proper procedures to detect missing competencies required in slinging. Also new personnel are handling pressure vessels or are required to work in pressure areas without proper permitting.

Some companies are reporting that more than 65% of their accidents or near misses are happening to new field personnel within the first 18 months of their field assignment. Most reported accidents and near misses involve extreme injuries. The field is relying on the training department to ensure that new personnel are adequately trained and on the HSE group to ensure that the HSE competencies required in the field assignment are covered during the on boarding.

This case study discusses the improvement process covering assessments, field observations, job safety analysis and possible remedies.

Introduction

Injury rates among new or ‘green’ candidates are more than twice of the overall worker population and are on the rise. According to research done by Go2 (http://www.go2hr.ca/), new candidates, regardless of age or race suffer five to seven times the risk of sustaining a workplace injury in their first six months on the job. Moreover, according to Hay Salary survey 2012 (Figure 1), over 60% of the workers today are below the age of 35 years old.
These young new entrants to the oil and gas industry have specific characteristics that could be related to the root causes of many of the accidents that happen during the first 18 months of their assignment. Once these causes are better understood, possible preventive measures could then be developed to lower the accident rate.

There is a popular misconception that young workers incur many injuries at work because of their risk-taking behavior and sense of invincibility. While this might be true in some cases, researchers today have revealed that young workers are more at risk because they lack the experience of their peers, they often work in environments with more hazards, and they frequently engage in more physical work than their older counterparts.

In the Petroleum industry in Alberta in 2010, 57% of disabling injury claims are generated by young workers aged below 34 years old (Figure 2) with the most common injury category being sprains, strains and tears (Figure 3).

Lost-Time Claims and Disabling Injury Claims by Age — Alberta: 2009 - 2010

<table>
<thead>
<tr>
<th>Age</th>
<th>2009 Lost-Time Claims</th>
<th>2009 Disabling Injury Claims</th>
<th>2010 Lost-Time Claims</th>
<th>2010 Disabling Injury Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>15-19 Years</td>
<td>17</td>
<td>2.2%</td>
<td>71</td>
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<td>20-24 Years</td>
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<td>25-34 Years</td>
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<td>35-44 Years</td>
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<td>576</td>
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<td>45-54 Years</td>
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<td>406</td>
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<tr>
<td>Total</td>
<td>786</td>
<td>100.0%</td>
<td>2,495</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Data Source: WCB Data, Prepared by Data Development and Evaluation.

Figure 2
Characteristics of Young Workers

To clarify the definition of young workers for the purpose of this SPE paper, it refers to employees below 34 years of age. The majority of this category of workers shares some common traits:

- As new entrants to the worksite and due to the lack of experience, young workers have a general lack of familiarity with basic safety procedures.
- Due to their young age, young workers come with a relative inexperience in the workforce and a general lack of experience to recognize when a workplace situation is dangerous.
- New and young workers are generally reluctant about asking questions or refusing to perform unsafe work, particularly if they do not have a thorough understanding of their rights or responsibilities as employees as they don't wish to appear uninformed or incompetent.
- Due to their young age, they are more likely to take risks, as they underestimate the risk of certain behaviors and generally possess a sense of invincibility and believe that workplace accidents happen to others.
- They desire to maintain their own self-image, such as having a macho or tough person syndrome (e.g., safety equipment is for wimps).
- Maintaining one’s image as being a competent worker (e.g., carrying very heavy loads).
- Choose not to use safety equipment in order to avoid being teased or made fun of by coworkers.
• They feel pressured to complete a job hurriedly and can be influenced by peer pressure, regardless of the risk involved.

Companies have typically approached the training of new employees, regardless of their age, with the same standard induction program, however these programs carry a lot of limitations and risks.

Challenges/Issues

An effective workforce is the key to any organization’s ability to achieve objectives. Some of the key challenges faced when completing HSE onboarding include:

1. New employee training requirements are not properly identified.
2. Age appropriate induction for behavior assessment and change has not been implemented in most companies.
3. New employees are not given the correct training to do their jobs.
4. In some cases, over-training where employees are trained too much over a short period of time also causes a problem as this results in diminished retention.
5. In some instances, companies fail to select candidates based on protocol such as interviewing or properly assessing that person and instead simply look at a CV and hire on this basis. A wrong decision can result in the loss of valuable time and money. The wrong candidate could be placed in the wrong working environment with unfamiliar equipment which could lead to incidents and injuries.
6. Some companies believe classroom training will produce competent candidates, however this is not necessarily the case as much of what is learnt in the classroom is perishable, creating two distinct concerns.
   a. Training versus deployment – the greater the time between these will result in diminished retention and proper on-the-job training and mentorship which will guide new candidates to competence while on the job.
   b. Candidates then face working in the real world without practical training and this can lead to incorrect use of equipment and cause injuries. Inappropriate training or training with the wrong focus can be lethal.
7. In some cases, when new candidates receive on-the-job training, companies will assign a mentor who is chosen because of timing, rather than skill and new candidates receive improper training because the mentor is not competent, which can again lead to incidents.
8. Another issue companies face is that they may not have the required skillset themselves to provide certain training in-house so they opt to outsource this to multiple contractors. This can cause further inconsistencies and confuse the work force. Inductees could end up arriving to site with unclear expectations which puts pressure on the more experienced site personnel. Lack of skilled labour and commercial responsibility can also be a key challenge.
9. Specifically when training and mentoring young workers, traditional methods of training are used such as instructor-led courses and e-learning. These methods are often not very effective as these young workers have grown up in a connected society governed by experiential learning, collaboration and social learning. While these new methods are used in schools and universities, they have only just started trickling down to the oil and gas industry but at a very slow rate.
10. Low social cohesion for temporary workers - having more part-time and temporary employees in a workplace may lead to a weak safety culture and to poorer safety education and training. These things, in turn, reduce the ability of employees to gain site-specific knowledge and skills, creating an environment where they are "new-on-the-job" for longer.

Solutions

There are a number of solutions to the challenges mentioned.

A. Identifying the right candidates

Hiring the right employee for every job is of critical importance for every organization, the right choice can contribute to organizational growth while impacting the work environment positively.

It is important to have a set job description which identifies specific requirements needed for the job, activities the person will do, responsibilities and daily tasks. The job description should link hazards associated with daily tasks/activities and the working environment. Selecting the correct candidate with the right characteristics, basic skill set and cognitive capabilities is another important factor to consider. The job description and candidate should be as close a match as possible; this will also help improve the success rate of the candidate. Candidates must be assessed properly to ensure they are suitable for the job and they should be interviewed properly by more than just the HR department. It is important for every organization to conduct the hiring process seriously without compromising on the qualities desired from the right candidates.

B. Identifying the right training requirements

Conducting employee training can be a daunting task, particularly when you have staff with a diverse set of skills and knowledge. It can be a waste of company time and money to provide training in areas where employees are already performing to standard. Instead, it's best to first identify the specific employee training needs and decide who will deliver their HSE training, when and how. Once identified, we need to clarify which training requirements are internally and externally driven. Internal training requirements could include site specific orientations or training to access restricted areas, while external requirements could include industry-recommended or legislative requirements such as hazardous materials handling. Once the requirements are identified, course durations, class size restrictions and certification requirements can be applied. Various training medias need to be selected accordingly to ensure the effectiveness of the training and the right behavioral change.

C. Integrating the work schedule with onboarding requirements

This will help ensure that workers trained today will be going to work tomorrow. Once training starts, expectations need to be clearly communicated by a single point of focus and everyone involved needs to clearly understand their own and others’ duties, what they need and when they need it. Training should be specific to the job description; classroom training typically is preparing candidates to learn under a mentorship or on-the-job program, depending on candidate experience. We are talking about ‘green’ workers so the information in class room needs to be a combination of hands on and theoretical knowledge, as all information is perishable. The real training will occur in the field.
D. Outsourcing
Outsourcing training requirements need to be determined in advance of a new employee joining the company. Training offsite, whether it is performed by the internal training department or an external contractor, would be ideal mainly because project sites can get very crowded, especially during major events as everyone has a higher volume of tasks. When a worker arrives with the pertinent information and proper training, it helps smooth the first interactions on site. If not training internally, selecting one provider that can deliver OR acquire the ability to deliver the desired training/testing is critical. When selecting a safety provider, one must ensure there is a history/track record of high volume and quality course delivery.

E. Mentoring
Mentors, coaches, or on-the-job trainers should be managed by a training, selection and competency program the same as any other position. They are responsible for ensuring that the candidate is shown the right way to apply what was learned in training and how it is applied to their daily tasks. Once a new candidate is taken to site, the trainer assigned to him must themselves be approved and competent. On-the-job training needs to be based on the job description and must have performance-based metrics to determine when a new candidate can be signed off as competent in a specific task.

F. Field observations
Once the training has been delivered and the worker is now mobilized, it is important to audit the personnel in the field to gauge the retention and more importantly the understanding of what was taught. Although most training programs have some components that help determine competency, once a worker arrives in the field, the influences of peers, sights and sounds can shed light on gaps in the education process. The idea here is not to trick or find fault, rather to ask questions and observe actions that verify the knowledge of those critical items. No student remembers 100% of the course, so it's important to determine what is being retained and what isn’t.

Example of HSE Onboarding Program

An Oil and Gas company has been struggling with a high rate of incidents of their new and young workforce. This new workforce has accounted for almost 60% of their total injuries and they were mostly injuries to the extremities. United Safety was contracted to perform an assessment on the root causes of the high incident rate among the new employees and provide recommendations to lower the rate of incidents. The assessment and recommendation process outlined above was used. The following chart explains it in more details:
Overview of the Process

United Safety conducted an evaluation of the current state of the HSE training and onboarding system through observing current training and interviewing onsite personnel. A clear picture/baseline for improvement in HSE training methodology was then established and put forward.

Findings of the evaluation were discussed with the Oil and Gas Company and a strategic plan was devised to mitigate gaps discovered and solutions were put forward towards creating a safer working culture.

Based on the strategic plan, all the required building blocks, such as communication lines, procedures, personnel resources and tactical planning were reviewed and refined.

Steps were then taken to carefully select and recruit the right candidates for the right job. Candidates were screened on their safety-related experience as well as their certification and were interviewed by at least one HR person and an experienced field person.

Despite the most stringent recruitment process, no employee comes perfectly equipped with every single skillset required for a particular role. Gaps in experience and qualification were carefully analyzed and a training program was identified to ensure that the recruit was completely qualified for the role. This was coupled with a comprehensive onboarding program conducted the day before his first day at work. All training provided to the new recruits was coordinated and provided by United Safety so all new recruits were exposed to the same way of doing things and encouraged to abide by the same high standards of safety. Based on communication abilities and personality, people with potential to be mentors were chosen from the more experienced field personnel and were trained. Once trained, these mentors were paired with the new recruits to help them learn the ropes while on-the-job.

Implementation of the HSE Management System with roles and responsibilities for HSE personnel and assistance was provided to roll out at the field level. This included training and implementation of program strategies to
management and supervision.

**Benefits**

Selecting the right candidate for the job will save companies both time and money as candidates will feel comfortable in their roles knowing that they are capable of fulfilling their job descriptions. The company is also more likely to retain employees who are performing tasks that they are capable of doing.

Identifying the correct training requirements early on in the recruitment process will ensure that there is increased job satisfaction and morale amongst employees which in turn increases employee motivation and reduces turnover. Proper training leads to increased efficiencies in processes resulting in financial gain for the company.

When companies outsource training, those using multiple providers are not working efficiently as workers will be taught differently and perform tasks differently onsite. Using one specialised outsourced safety service provider is a good option as this will ensure everyone is taught the same way and they all use the same methods which will avoid confusion onsite. Training offsite also means there is minimal site disruption.

Mentoring is something that can benefit everyone. As well as helping the mentee develop and advance through their career, get to know the site and equipment, the mentor also gains extra skills like leadership skills and understanding from the partnership. A mentor can help a new worker answer questions about his or her job function and get a perspective on the industry.

Performing field observations helps companies determine the level of training a new worker is taking in. One can identify gaps where additional training is required and therefore improve the productivity of the worker. Holding regular review meetings will ensure clear and concise communication, learnings can be captured and actioned and training schedules can easily be reviewed and adjusted which improves the schedule and reduces overall cost because workers have been properly assessed and given the correct training.

**Conclusion**

Communication and proper planning play a crucial role when hiring new employees. Ensuring you match the right candidate to the right job description and identifying training needs early on in the recruitment progress is vital during onboarding.

Before training internally, ask yourself this question - is training your core business? Confusion amongst the workforce costs money and your main goal should be ensuring that once workers are through the gate everyone should be productive. If you opt for an external safety contractor, ensure you select a provider with a system that:
1. Can accommodate changing scopes of work during the peak periods or specific job requirements once in the field.
2. Can collect and report on Key Performance Indicators and best practices for future planning.
3. Has a record of delivering both of the above.

Mentoring is a great way to introduce new employees to the work site but make sure the mentor has the necessary skills to properly guide your new worker.

References:
Go2 - http://www.go2hr.ca/health-safety/program-tools/young-and-new-workers