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# Transitioning from the Reflection-Based Safety Literacy Classroom to the Worksite: The Student Experience

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*Reflection-based safety literacy is a form of education that builds bridges between the classroom and the workplace. This paper explores how experiences shared in the classroom create connections between health and safety learning material and its application in personal and professional lives. The exploration of the student experience showed that students transferred course themes to the work environment more effectively when sharing the experience with a colleague and created personal connection to the content through application and reflection between learning sessions. Instructor and student stories demonstrated that a variety of experiences in implementing and interpreting the material resulted in a meaningful context for the student experience. These themes provide insight into the value of reflection and dialogue as tools to enhance health and safety curriculum.*

*La formation à la sécurité basée sur la réflexion est une forme d'éducation qui érige des ponts entre les salles de classe et les milieux de travail. Cet article explore la mesure dans laquelle le partage d'expériences en classe crée des liens entre le matériel pédagogique portant sur la santé et la sécurité d'une part et son application dans la vie personnelle et professionnelle d'autre part. L'étude de l'expérience des étudiants a révélé que ceux-ci transféraient plus efficacement au milieu de travail les savoirs acquis en classe quand ils partageaient l'expérience avec un collègue et qu'ils créaient des liens personnels avec le contenu par l'application et la réflexion entre les cours. Les récits des enseignants et des étudiants ont démontré que diverses expériences portant sur la mise en pratique et l'interprétation du matériel ont créé un contexte significatif pour l'apprentissage. Ces thèmes offrent un aperçu de la valeur de la réflexion et du dialogue en tant qu'outils pour améliorer le programme d'éducation à la santé et à la sécurité.*

This study explores the following question: How do students describe their understanding of Occupational Health and Safety as they transition from the reflection-based safety literacy classroom to the worksite? A review of the literature on Occupational Health and Safety (OHS) training reveals a gap in the research-based body of knowledge of the impact of reflection-based OHS education at a post-secondary level.

This research project analyzed a Safety Literacy course (Appendix A) designed to help new employees develop a cultural and intrinsic understanding of a safe work environment. Safety literacy was defined as the degree to which individuals have the capacity to obtain, process, and understand the basic information needed to make appropriate safety decisions. The course also

developed the ability to evaluate a situation and internalize the potential impact to the safety of oneself and others. The research was undertaken to understand students' perceptions, attitudes, and their individual connection to OHS after participating in reflection-based Health and Safety education at a post-secondary institution. The investigation addressed both the students' learning experience and their transition to the worksite as an employee. Learners were provided with the opportunity to evaluate situations and internalize the potential impact to the safety of oneself and others. This study was designed to understand connections students make between the course, their personal safety, classrooms, and ultimately their worksites. Recommendations to improve the quality of reflection-based OHS curriculum and practice are included.

## Literature Review

A literature review recognized the current body of knowledge available in North America, the United Kingdom, and Australia, which are recognized as leading OHS systems and processes. The initial search focused on literature related to reflection-based education as well as the impact of post-secondary Health and Safety education on perceptions, attitudes, and behaviours. The literature review revealed a gap in the research related to reflection-based OHS education (Institute for Work and Health, 2010; Teizer, Cheng, & Fang, 2013; Shendell, Mapou, Kelly, Lewis, Houlroyd, & Murtha, 2013; Pisaniello, Stewart, Jahan, Pisaniello, Winefield, & Braunack-Mayer, 2013). It was also found that a "more evidence based and integrated approach should be developed among schools and workplaces" (Thamrin, Pisaniello, & Stewart, 2010) in support of consistent messaging in the education of OHS and consequently the perception of safety (Langdon, Balchin, & Mufamdi, 2010; Gyekye & Salminen, 2009).

Anderson, Gunnarsson, Rosen, and Mostrom (2014) posit that the view young people have of occupational safety governs their behaviour and perception of risk. Further, they found that young workers tend to please their supervisors and that fear of losing their jobs inhibits them from making complaints. Anderson et al. (2014) propose that this can be improved by training young workers in occupational health and safety as part of their education. They suggest that a systemic approach to training young workers in the work place is lacking, an opinion substantiated by multiple researchers (Agran, Krupp, Spooner, & Zakas, 2012; Blair, Seo, Torabi, & Kaldahl, 2004; Benderly, 2010; Chatigny, Reil, & Nadon, 2012; Minerva, n.d.; Petersen, Reynolds, & Ng, 2008). Dingsdag, Bing, and Sheahan (2008) found that for 107 participants in 11 Australian companies, there was a general lack of OHS education, implying that companies that seek to improve site safety culture need to develop and support people with both training and education. Dingsdag et al. (2008) argued that by implementing uniformity, one can nurture an environment in which a positive safety culture can be developed.

The researcher broadened the scope of the literature review to focus on reflection in education and pedagogy supported by broad philosophical understanding. In *Taking College Seriously, Pedagogy Matters!,* Mellow, Woolis, Klages-Bombich, and Restler (2015) identify that concurrent use of self-reflection and regular engagement with peers created a robust learning environment. According to Siebert and Walsh (2013), "the benefits of using reflection for learning at work have been widely recognised and the pedagogy to support reflection is now established" (p. 167). Further, they propose that "through reflection learners/workers are supported in analysing and evaluating their workplace and helped in identifying where change may be an option for them" (p. 176). According to Margaret Wheatly (2006):

> It's hard to look at modern life and see our capacities for reflection or meaning-making. We don't use our gifts to be more aware or thoughtful. We're driven in the opposite direction. Things move too fast for us to reflect, demanding tasks give us no time to think, and we barely notice the lack of meaning until forced to stand still by illness, tragedy, or job loss. Despite our hurry, we cannot stop life's dynamic of self-reference or the human need for meaning. If we want to influence any change, anywhere, we need to work with this powerful process rather than deny its existence. (p. 147)

The literature indicated a need for research investigating the sustained impact of critically reflective health and safety education on the attitudes and behaviours of participants.

## Study Design

The purpose of this research was to generate practical knowledge by analyzing the student experience of reflection-based safety literacy education both in the classroom and subsequently on the worksite. The research was focused on developing an interpretive understanding of the lived experiences of participants in a specific safety literacy course. In interpretive research, findings emerge through the engagement of the participants, the researcher, and the research methods (Creswell, 2013). Subjectivity is valued in this approach, based on the assumption that complete objectivity on the part of the researcher or the participants is unachievable (Ajjawi & Higgs, 2007). It is understood that the research is constrained by the values inherent in the questions being asked, the values of the researcher, and the methods used to generate and interpret data (Ajjawi & Higgs, 2007). Student experiences are shaped by the situatedness of their learning and work environments. The interpretive paradigm was chosen as the best starting point for a long-term project that seeks to generate new understandings of the complex phenomena of reflection-based learning in a post-secondary setting.

The phenomenon under investigation, in this case, is the experience of transferring reflection-based safety literacy from the classroom to the worksite. Students of a particular reflection-based safety literacy course were engaged through interviews and focus groups. The resulting data was used to explore the themes that encapsulate the experience for participants and to describe the lived experience of engaging with the learning outcomes of the course in applied workplace environments. Thematic similarities related to attitudes, behaviors, and student experiences of reflection-based OHS education were analyzed in the interpretive tradition of hermeneutics, specifically hermeneutical phenomenology. The sample size directly correlated to the number of participants involved in a pilot offering of a Safety Literacy course at a Canadian polytechnic in 2015.

The design and methodology were reviewed by the polytechnic's research ethics board to protect the interests of the research participants and were approved prior to initiation of the research. Practices were implemented to protect the confidentiality of the participants, to ensure voluntary and informed consent, and to explain the purpose, risks, and benefits of involvement in the study. Study information and consent letters informed participants of the process to withdraw from the research within 30 days of data collection. Data was coded to remove linkage to personal information and was cross-referenced as detailed in Appendix B. Upon compilation of data, all personal information was removed from the study. To increase readability of the document, each participant was assigned a pseudonym to replace the codes.

The participant demographics reflected diversity of age, race, gender, and industries; however, they all work within the same Canadian polytechnic institution. Sharing the same

employer increases the need for identifying factors to remain private to protect the anonymity of the participants.

## Methods

As previously identified, this study analyzed thematic similarities of the data gathered from participants through focus groups and individual interviews. To accommodate for conflicting schedules, two focus group sessions were conducted directly after the completion of the course. All students enrolled in the pilot course were invited to participate in the research, resulting in seven volunteers, a 39% participation rate for the course participants in the formal study. Individual interviews were conducted six months after course completion to analyze student retention of course content and the lived experience of its application in a work setting. Six participants, 86% of the original group of participants, agreed to take part in the individual interviews.

## Data Collection and Analysis

The research project offered a combination of face-to face learning and online learning for an effective course time of 15 hours scheduled over a six-week period. Pre-reading was assigned to provide a foundation for in-class activities (average of one hour per week). Eight hours were spent in the face-to face learning environment focusing on reflection on how the content applied in both occupational and non-occupational contexts. Appendix A provides more detail on the specifics of the course content.

The study recorded and transcribed focus groups and personal interviews and analyzed the data for themes in accordance with Creswell's procedures (Creswell, 2013) for conducting phenomenological research. Data collection took place in two phases: first, immediately after completion of the course, and second, after a minimum of six months from course completion, with two focus groups to accommodate student schedules. The transcripts were analyzed independently. The six-month gap in data collection was designed to evaluate the students' lived experience of the learning outcomes of the course as experienced while on the work site and to support collection of enough data to reach saturation in accordance with Creswell's method (Creswell, 2013). Participants were given the opportunity to validate or discount the researcher's understanding of the information they provided to reduce bias and to increase trustworthiness of the data analysis.

The initial focus group participants responded to the following seven questions:

1. What was the most engaging part of the safety literacy course for you?
2. What was the least engaging part of the safety literacy course for you?
3. What opportunities were you provided to reflect on your attitudes and behaviours?
4. Are these reflections important in respect to integration of Health and Safety into your everyday life?
5. Do you feel the course influenced your attitude or behavior? If so, in what way?
6. What influenced or affected your experience in the course?
7. Is there anything else that you would like to say?

Individual interviews were also conducted eight months after course completion and took the form of 30 to 90-minute conversations, with each interview initiated by the following two key questions:

1. What do you remember about the Safety Literacy Course?
2. What sustained impact have you experienced?

Each interview transcript was also analyzed independently. All participants in the study were working while they were attending the reflection-based Safety Literacy course making their immediate experience relevant to the exploration of the transition experience throughout the study.

The process for analysis included immersive review of data transcripts, reflective writing, and interpretation, in accordance with a hermeneutic cycle of data analysis. The first step was horizontalization of the data to combine, through clusters of meaning, the individual student experience into a representation of the shared experiences of participants. All transcripts from the first data set were reviewed to extract significant statements and to get a feel for each participant's descriptions of his or her lived experience, creating a textual description as defined by Creswell (2013). The aggregate data was then combined with the second data set from the individual interviews to develop a description of the context that influenced the participant's experiences, a structural description as described by Creswell (2013). From these descriptions, further analysis was done to develop a composite interpretation of the shared experiences and the essence of the participant's experiences. The immersive review was completed by a single researcher with all transcripts and analysis being reviewed and verified by a second researcher once coded. This analysis and review took place in 2016 after the completion of the second data collection through individual interviews.

## Findings and Discussion

The high-level themes that emerged include: 1) shared learning experiences add value; 2) diverse learning groups provide varied perspectives; 3) storytelling adds meaning; 4) a face-to-face setting enhances learning over time; and 5) the sharing of the instructor's own experience influenced recollection of content.

### Shared Experiences

This study found that shared experiences resulted in meaningful conversations and dialogue among students. Shared experiences were cultivated in a variety of ways. A brief review of pre-assigned theoretical components provided context for class. Weekly face-to-face class time provided opportunities to engage with other students regarding their experience with course themes during the work week. Returning to their work environment while the material was fresh provided an opportunity to reflect on how the content applied on the job. This opportunity was heightened for those participants who had either a peer in the classroom or other people in the workplace with whom to discuss course content. Participants who had the ability to continue the conversation on the job indicated an application of health and safety behaviours without supervisory influence. Danielle elaborated:

> It helped having a direct co-worker. I must recommend if you can get someone … to go with a friend or

> co-worker so then you can take it outside and talk about it because that really helped too. We could talk about how it could impact us directly with no one else's input.

The descriptions of participant transition to the worksite indicated they became more aware of their surroundings and were more willing to speak up in their work area when they saw something that was a potential hazard. For example, Danielle indicated, "Before, I didn't really notice a lot of things … but now I will speak up." Participants that shared the experience with a peer indicated that they were transferring the learning to the workplace, continuing to apply it after the course concluded, and influencing others in their work environment to take on the practices discussed. Jason reflected, "We could discuss [why] we aren't doing this [in our area]," to which Danielle added: "We should be doing this instead of this …, so there were a couple of those conversations that the two of us have had [while working] and questioning things." Ahmad supported this as well: "I was going to say that was a fortunate thing for me that I had a partner there too, so we're able to outside of class time have a conversation." Shared experiences created opportunity for extended conversation and reflection in the participant's work environment.

**Diversity**

This study found that there is value in having a diverse group of students in the classroom. The positive impact of diversity on classroom discussions was a consistent theme in the individual interviews. Participants shared their connections to the lesson in class discussions. This allowed participants to see the lesson through other perspectives. Michelle recalled "discussing them amongst ourselves within a group and then […] looking at the question responses by the other groups and […] they kind of make you think about the different perspectives as well." The "wholesome discussion and participation by the students there" (Cheryl) created value for participants who had been through health and safety education in the past as well. One way that Ahmad articulated this value was that "everybody's perspective on health and safety gave me a better appreciation of where people were, where their areas were with [implementing health and safety]" which allowed for benchmarking. "The participatory nature of the delivery of the course and the involvement of the students" (Cheryl) was beneficial in sustaining the overall connection to the content. Diversity allowed for multiple perspectives to be shared with respect to the content application in multiple environments.

**Storytelling**

Storytelling by both the instructor and students provided an opportunity not only to explore content in a classroom environment but also to discuss interpretation and application with a diverse group of learners. This finding is consistent with the research: "sharing of experiences through the device of storytelling enables individuals to build the bridge of understanding between one another" (Abrahamson, 1998, p. 441). Ahmad expressed:

> … that's what happens in those discussions. Everybody tells their own stories about health and safety as it applies to whatever particular topic we were on … and then [you] make a mental picture, stories help do that. Stories give context, they give something solid to [the concept].

Xiang identified this as "interaction that enhances the learning … sharing experiences." These

experiences then become part of the context of the course, and while some of the specific OHS jargon may not be recalled easily after a length of time, the intention behind the content was sustained.

During the course, one participant shared a story of their son mowing the lawn wearing flip flops, and the discussion turned to a statement. Cheryl summed it up by stating, "If you're going to be embarrassed about explaining it to a paramedic, then you shouldn't be doing it in the first place." In the individual interviews, this particular story was mentioned by more than one participant, and each of them indicated a sustained change in behavior. Danielle recalled:

> I also used to wear flip-flops and shorts while out there using the weed whacker, and, yeah, it hurts when it hits your legs, you'd think the bruises would be enough but no. This summer I did a lot more yard work where I actually dressed appropriately.

Participants recalled the stories that were shared and their connection to content more than the specific words in the content delivered, which could indicate a deeper level of understanding than rote memorization.

### Enhanced Learning over Time in a Face-to-Face Setting

Participants found that there was value in exploring the content ahead of time to allow for personal reflection and then to explore further with conversations in the classroom. Jason explained that "the pre-reading made you go through and actually look at and think about what some of those things mean and then you start thinking about how [that relates] to what it is I do." Participants reported that there was little value in reviewing the content assigned in detail in class and felt that the time would be better spent deepening their understanding through conversation and practical application as opposed to lecture. Michelle explained that having multiple conversations about the same topic helped to clarify classmate perspectives, "You don't know how they were looking at it, right, they've just written something down… well let's approach that, let's find out why." Richard described the value of "doing the face-to-face with a human being or other human beings in a class and the aspect of participating, discussing, exchanging [information and sharing ideas]." This experience aligns with other studies of the student experience and with theories of pedagogy (Sentis, 2014).

Participants also indicated a growth of learning throughout the seven weeks of the face-to-face sessions. Jason suggested that "because it was building on every week, you are doing a little bit more, and by the end of it … we were having better discussions, we were having better conversations about what was happening." Participants went on to explain their growth as going from nonchalance to a situation to discussing what was going on around them and addressing safety issues that were not in their direct area of concern. Danielle indicated that "[I] will walk up to [someone creating a hazardous situation] and be like, hey, you know you're kind of creating a hazard right now, and this is what you need to do to be safe …." The ability to reflect on conversation after the class and come back and share connections created sustained learning.

### Influence of the Instructor

Students benefited from the presence of an experienced health and safety advisor in the classroom. The knowledge of the instructor and the instructor's ability to provide the class with

varied applied experiences, such as sharing stories and strategic questioning, brought deeper conceptual context to the student experience. Students found shared stories to be far more beneficial than the theoretical lecture component of the course content. The value of the instructor's ability to engage the student in the classroom is consistent with the findings of a 2010 study that indicated the success of safety training in schools is dependent upon the enthusiasm and experience of the teacher (Thamrin et al., 2010).

## Discussion and Recommendations

As discussed, the study finds that the positive influence of the shared experience was heightened for those participants that either had a peer in the classroom or had people in their work area with whom to discuss what had been learned. This is indicative of added value and a sustained impact of the learning. It is recommended that attendees in health and safety offerings be paired with a co-worker to provide the opportunity to extend conversations from the classroom into the work environment. This is substantiated through research by the findings of Lei, Gorelick, Short, Smallwood, and Wright-Porter (2011) regarding the benefits of being part of a cohort. Gyekye and Salminen (2009) also indicate that "there is tremendous synergism in the multidisciplinary participant and the mixing of students with practitioners" (p.115) indicating value in a diverse classroom setting. Key benefits of this shared learning include the creation of a group of supportive learners with similar goals, a more collaborative voice, and higher retention and success rates (Lei et al., 2011). Further, they identify that students are more intrinsically motivated to learn the material and are more prepared to integrate and apply the learnings to reality (Lei et al., 2011).

Participants reported that the most engaging components of the course were conversations, interactions, and applied learning opportunities. Pisaniello et al. (2013) found greater levels of engagement with students through face-to face interactions and recommend the incorporation of class discussions and case studies in health and safety education. Students were able to explore the content, reflect on their learning individually, share their perceptions, and then receive differing interpretations and perceptions from others through a scaffolded learning process. This provided learners with an opportunity for questions, critique, personalization, and ultimately, internalization of the content in a way that was individualized. They found their own meaning in the material. These findings substantiate the recommendation that critically reflective health and safety education be offered utilizing a similar scaffolded approach to the pedagogy of the course.

Participants took away an integrated awareness of the general requirements of Health and Safety and a sustained change in perception towards hazardous situations. This was considered more important than the ability to recite specific sections of the legislative requirements of the Occupational Health and Safety legislation. Participants who were new to the concepts of the material indicated they were more likely to recognize, assess, and control a hazard without specific guidance or notification than they had been previously. For example, when discussing the sustained impact of the course, Danielle identified a tendency to make more effort in doing things and to being more likely to bring things forward to their supervisor. When asked if she would have brought things forward before, her response was: "Probably not, because I probably wouldn't have thought of it that way. And, you know it's not that I could not approach [my supervisor] before. It was that I really never would have thought of approaching for certain things." Further, those participants that had been exposed to similar content in the past found the opportunity to discuss differing perspectives provided them with a new awareness and heightened connection to a safety-

focused attitude. Michelle suggested that an offering of regular opportunities to have similar discussions and sharing of experiences would be beneficial in the long term as a follow-up to the course. These findings substantiate a recommendation that a community of learning should be developed and maintained after the course to support ongoing conversation, in addition to a having a peer in individual learning sessions.

Further, the instructor encouraged discussion and reflection on personal action through strategic questioning of the students regarding their own experiences. This type of strategic questioning is discussed in detail in Peavey's (1997) work on strategic questioning in which she describes it as a process that opens us to another's point of view, inviting our ideas to shift. One of the key features she describes is that it creates ownership of new information that remains with the person answering the question. The ability to frame provocative questions requires a connection to the content and an ability to challenge values and assumptions (Peavey, 1997). It also requires an ability to listen dynamically and dig to find the deeper meaning. This ability is paramount to the success of future offerings of the course.

Most participants indicated that opportunities to reflect were provided throughout the course; however, one participant recommended integrating a personal reflection journal into the course to provide opportunity for deeper critical reflection. This recommendation is substantiated by multiple sources on the value of directed journaling to aid reflective practice for the learner (Terrion & Philion, 2008; Moon, 1999; Boud, 2001; Hiemstra, 2001). We recommend that future iterations of the course incorporate a formalized journaling activity with questions that provide guidance for a focused reflection to be incorporated into the classroom discussion.

## Opportunities for Further Implementation and Research

Every participant in the study summed up his or her interview with a recommendation that the course be held on a regular basis, provided to new staff and, ideally, to all members of their shared community. This theme is not directly related to the question of the student experience, but is interesting nevertheless.

Each participant responded similarly when presented with the question "Is there anything else you would like to share with me regarding your experience in the course?"

> Cheryl responded, "I think each employee at [this institute] should be going for this [course]. Similar [to] first aid or mental health. I think the awareness piece is important, but also the application of [the concepts] in the workplace will develop a stronger culture."
>
> Ahmad: "… and if everybody did take the course, you know, if it was something that everybody needed—was required to take, I think that would be a good thing."
>
> Jason: "Everyone from the [executive] down should take it, starting with [the executive]."
>
> Danielle: "I actually think everybody else should be taking it too."
> Xiang: "[I would make a suggestion that it] would be a good idea to incorporate it for new staff coming in…and to [provide refresher training or periodic updates to all staff] on a year-to-year basis."
>
> Richard: "… if everybody has the same training, everybody has the same mentality, there is no fear of going anywhere."

Michelle indicated that "… there is an opportunity to make the change and to grow the culture, but it has to be complete within the organization, it can't just be one area that's trying to do the change."

## Conclusion

We identified a gap in the available literature related to the sustained impact of reflective education in OHS education. We found that a shared learning experience and that the instructor's field experience related to OHS deepened participant engagement with the material. In the post-training interviews, we identified that stories connecting with the material were more easily recalled than the specific content delivered. Lastly, we discovered that delivery over an extended amount of time allowed for integration of the OHS content into the participants' work environments and personal lives.

This study of the student experience in the Safety Literacy course has identified value in the creation of a shared understanding of health and safety through a reflection-based course. We recommend that the pilot be implemented on a larger scale to develop a consistent level of safety knowledge and motivation across the institute. In conjunction with the pilot, we recommended that a quantitative analysis of department performance on leading health and safety indicators focused on compliance and improvement, such as those as recommended by Alberta Workplace Health and Safety in Figure 1, be implemented to track the long-term impact of reflection-based safety-literacy education.

Safety Literacy learning had impact because students were able to discover the content, apply the learning, reflect on it, and discuss their experience. Participants easily recalled individual stories and experiences that were shared; these conversations connected individual students to the underpinning messages of the content. While each participant shared individual experiences and meanings, the themes were very strong in the individual interviews, indicative of a saturation of data as explained by Creswell (2013).

The student experience was also influenced by the instructor in the session and by having a health and safety advisor present as a support resource. As reflected in the interviews, the knowledge of the instructor and his or her ability to provide the class with varied experiences in implementing and interpreting the material through the sharing of stories brought deeper conceptual context to the student experience. Further research exploring the impact of critical reflection in health and safety education could provide educators and trainers with evidence-based guidance for future curricular development.

| Health and Safety Practices | 80 – 100% (4) | 60 – 80% (3) | 40 – 60% (2) | 20 – 40% (1) | 0 – 20% (0) |
|---|---|---|---|---|---|
| 1. Formal safety audits at regular intervals are a normal part of our business. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 2. Everyone at this organization values ongoing safety improvement in this organization. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 3. This organization considers safety at least as important as production and quality in the way work is done. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 4. Workers and supervisors have the information they need to work safely. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 5. Employees are always involved in decisions affecting their health and safety. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 6. Those in charge of safety have the authority to make the changes they have identified as necessary. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 7. Those who act safely receive positive recognition. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 8. Everyone has the tools and/or equipment they need to complete their work safely. | ☐ | ☐ | ☐ | ☐ | ☐ |

*Figure 1.* Performance Indicator Measurement (Alberta Labour, 2016)

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## Appendix A: Safety Literacy

### COURSE DESCRIPTION

This course is intended to provide foundational information to support the development of a fundamental level of knowledge for students. Students will be provided with a basic overview of applicable legislation, hazard and risk evaluation and control techniques, workplace inspections and investigations.

### DELIVERY METHOD

This course will be taught using a variety of delivery methods which may include face-to-face, online, or blended teaching platforms. Activities such as collaborative exercises/assignments, seminars, labs, discussions, audio/visual presentations, and case studies may be used to support learning.

This course will increase safety literacy and raise awareness of potential work site risks and hazards. Students will be able to recognize the importance of an integrated approach to occupational health and safety in today's workplace. Successful completion of the course will support participants in being a positive contributor to a safe work culture in any workplace.

**Note:** The specific pilot for the research was offered with a combination of face-to face learning and online learning for an effective course time of 15 hours. Content was assigned for individual exploration prior to attending class to provide a foundation for in class activities. Eight hours were spent in the face-to-face learning environment where classroom activities focused around creating opportunity for both reflection-in-action and reflection during action and reflection after events (Boud, 2001).

To support the learning experience in the context of a workplace setting a Certified Safety Professional facilitated the learning and was supported with a Site Safety Advisor to address organization specific Health and Safety Policy and Procedure.

## Appendix B

Data obtained from participants in the focus groups and individual interviews have been cross referenced and anonymized. Participants in the focus groups were assigned an alphanumeric code such as PARTICIPANT A1 and PARTICIPANT B2, participants in the individual interviews were coded PARTICIPANT 1 and PARTICIPANT 2 and the data from the focus groups was cross referenced for individual connections. The individual participants were then assigned individual pseudonyms to increase readability of the document, as identified below.

**Participant Cross Reference:**

Participant 1 – Michelle
Participant 2 – Danielle
Participant 3 – Jason
Participant 4 – Cheryl
Participant 5 – Ahmad
Participant 6 – Xiang
Participant 7 - Richard