

# **An Evaluation of the Ministry of Labour's new Joint Health and Safety Committee Certification Training Program Standard**

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## **Executive Summary**

### **Introduction**

This report is prepared for Jules Arntz-Gray, Director of the Training and Awareness Branch (TAB) at the Ontario Ministry of Labour (MOL), Prevention Office. TAB is the ministry's lead on prevention-based programs focused on quality training, raising awareness and improving occupational health and safety culture. A prominent workplace safety training program, as prescribed by Ontario's Occupational Health and Safety Act (OHSA), which falls under the leadership of TAB, is the Joint Health and Safety Committee (JHSC) Certification Training Program. A JHSC is a requirement under the OHSA for certain qualifying workplaces as prescribed under the Act and its regulations and must be composed of both worker and employer representatives. Where at least two members of a workplace JHSC are required to be certified, they must complete Parts One and Two of a JHSC certification training program. This certification training must be delivered according to the MOL training program standard and by an MOL approved training provider.

On March 1, 2016, the Training and Awareness Branch introduced a new JHSC certification training program standard. This was the first time the training standard had been updated since 1996. As of July 2017, 41 unique training providers were already delivering JHSC certification training courses across Ontario under the new standard and over 20,000 learners had taken the new training program. However, despite the number of workers already trained under the new certification training program standard, the Ministry is not fully informed of its impact on JHSC training across the province.

Therefore, the overall objective of this project is to evaluate the MOL's changes to the JHSC certification training program standard. An evaluation will reveal whether the updated training program has met the overall objective the MOL set out to achieve, to "strengthen the common, consistent, foundational training requirements for all certified JHSC members". JHSCs are essential in helping Ontario workplaces establish a strong health and safety culture and strengthen their internal responsibility system. In turn, they assist the MOL in achieving a key portion of their mission, to improve worker health and safety across the province. That is why the MOL was focused on ensuring that consistent, high quality JHSC training is taking place across the province.

### **Methodology**

A mixed methods research strategy was designed for this project. Two major data collection methods were used; a survey and interviews. The survey was intended to get feedback from learners who had taken a JHSC certification training program course under the new standard, while the interviews were designed for training program instructors, to acquire their perspective as subject matter experts in the field. Training program instructors were also chosen

for their potential ability to compare the JHSC certification training program under the new standard with the training program under the original standard.

There were 107 responses to the survey and of the 107, 77 were complete, giving the survey a completion rate of 72 percent. For distribution of the survey, MOL approved JHSC certification training providers were asked to disseminate information to their learners on how to participate. However, only six out of 41 providers confirmed that they provided information about the survey to learners. In total, the six confirmed providers sent out 242 email requests to learners to participate in the survey; resulting in a 32 percent response rate. However, this response rate assumes that those providers who did not confirm with the project client, did not send any information about the survey at all to their training participants. The response rate, without this assumption, is likely lower. For the interviews, a total 13 JHSC certification training program instructors participated. To put this in context, as of August 2017, there were an estimated 320 JHSC certification training instructors in Ontario. Of the 13 interviewees, seven instructors worked at private, for profit training organizations and six worked at MOL funded, non-profit health and safety associations. The data and information gathered from the survey and interviews was analyzed using quantitative (mainly descriptive statistics) and qualitative (thematic analysis) methods.

This project was based on an evaluation framework that considered the overarching and specific objectives that the MOL set out to achieve when updating the JHSC certification training program standard. The specific objectives of the MOL were to: improve the design of the training program, improve the training program's learning outcomes, and offer new, updated course delivery models to better cater to learner's needs (e.g. blended learning). By improving the JHSC training program, the MOL's overarching goals in alignment with the ministry's mission, were to: strengthen health and safety culture throughout workplaces in Ontario; and improve workplace party compliance with legislative and regulatory requirements through improved JHSC training. These objectives guided the data collection and findings of the project.

### **Findings**

#### Design of the JHSC Certification Training Program

The survey results showed a high level of consistency in the design of JHSC certification training courses being taught in Ontario. For example, on average, 90 percent of respondents across both Part One and Part Two courses, felt that the design of the courses they took, reflected the required design elements of the new certification training program standard. In addition, the interview results revealed important improvements in the design of the courses under the new training program standard such as the increased interaction now present and the new minimum time requirements that now allow instructors to cover more material.

However, the findings also revealed some issues with the design of JHSC certification training courses under the new standard that may need to be addressed. For example, the most common issues cited by the survey respondents were that; more time is still required in the courses to cover all the material, course materials are lacking clarity and often accessibility and

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

that the JHSC certification program is not always useful enough to all sectors (referring to the Part Two course in particular). Furthermore, interviewees also touched on the challenge of designing courses according to the new standard in order to pass MOL approval and the back and forth on design requirement details that is often necessary.

### Learning Outcomes of the JHSC Certification Training Program.

The results from the survey and interviews revealed that the learning outcomes outlined as requirements in the new training standard for Part One and Part Two certification courses are not only being consistently applied during JHSC courses, but they are also appropriate and reflective of the current health and safety environment. For example, 100 percent of respondents (combined) found the learning outcomes were either very appropriate or appropriate for the Part One course and 93.5 percent (combined) found the same for the Part Two course. For the learning outcomes of the Part Two course, interviewees were very supportive of the new requirement under the standard, which requires learning about hazard management tools and the recognize, assess, control and evaluate (RACE) model; a noticeable improvement over the original JHSC certification training program.

The interview findings also revealed some concerns regarding the learning outcomes in the new training program standard. Interviewees noted the unnecessary repetition required in the Part Two course, as instructors are required to repeat the RACE model and practice using a hazard management tool for each of the six hazards to be covered. On the topic of the six minimum hazards to be covered in Part Two, interviewees noted the challenge of ensuring the hazards are relevant to all learners present in a course (as they may represent a variety of different sectors). This was cited as more of an issue for smaller for-profit providers and less for the larger MOL funded health and safety associations providing training.

### Delivery of the JHSC Certification Training Program

Offering new course delivery models for learners was also part of the MOL's objective to strengthen JHSC certification training. The MOL did this by including a new blended model (a combination of eLearning and in-person training) as a delivery option for the JHSC certification training program. However, due to the very small amount of survey respondents who had used the blended learning model for their Part One JHSC certification training course and the lone interviewee who taught a course using it, the project's findings were not significant. However, an important finding that emerged from both the survey and interviews was that the new blended learning model has not yet gained traction as learners and training program instructors still feel much more comfortable with in-person learning.

### Strengthening Health and Safety Culture and Improving Workplace Party Compliance

The survey findings revealed that an average of 94.4 percent of respondents either strongly agreed or agreed that following JHSC certification training they are; using the knowledge gained, impacting the culture at their workplace; and are in a better position to ensure their workplace is in compliance with legislative and regulatory requirements. More robust measurement would be required to truly assess whether the new JHSC certification training

program is having a real impact on culture and compliance by way of JHSCs at the workplace. Nonetheless, the survey results showed that it is indeed headed in the right direction; as learners felt more prepared to influence health and safety culture and compliance at their workplace following JHSC certification training.

### **Recommendations**

Based on the findings from the survey and interviews, the following recommendations were generated to guide the MOL in addressing challenges and areas of concern that were noted by the learners and training instructors throughout this evaluation.

1. **Part Two Learning Outcomes:** The MOL should consider changing Learning Outcome 8.2.2 under Section 8.2 of the Part Two Learning Outcomes, to allow instructors flexibility in choosing the number of hazards for which they demonstrate how to apply the RACE principles to their learners.
2. **Amending the Refresher Course Requirement:** The MOL should consider amending the requirement under the new JHSC certification training standard that requires learners as of March 1, 2016, to take the Refresher Course every three years, to have it also include certified JHSC members that took training before March 1, 2016 under the original standard.
3. **Blended Learning (eLearning):** The MOL should explore options to improve learner and instructor uptake of the new blended learning option for JHSC certification training courses.
4. **Private Training Providers:** The MOL should study the impacts of the new JHSC certification training program standard on smaller private training provides versus larger MOL funded training providers (i.e. health and safety associations).
5. **Relevant Hazards for Part Two Course Learning Outcomes:** The MOL should promote their “New JHSC Certification Training Guidelines for Employers” to further educate employers on how to select hazards for the Part Two training course that are relevant to their workplace.

Despite the limitations with this research, such as the sample size of learners for the survey, this research provides a strong, early indication of the positive impacts that the new training standard is having as well as the improvements still needed. The MOL has committed to a complete review of the JHSC certification training program every five years. This research should not only guide the MOL in addressing current issues with the standards now, but it could also act as a starting point for the five-year review to build from.

**Contents**

Acknowledgements..... 1

Executive Summary ..... 2

    Introduction ..... 2

    Methodology ..... 2

    Findings..... 3

    Recommendations ..... 5

1.0 Introduction..... 10

    1.1 Project Client and Problem ..... 10

    1.2 Importance and Need ..... 10

    1.3 Project Objectives ..... 11

    1.4 Background and Context..... 12

    1.5 Organization of the Report..... 15

2.0 Literature Review and Framework for Evaluation ..... 15

    2.1 Literature Review ..... 15

    2.2 What is Occupational Health and Safety?..... 16

    2.3 Jurisdictional Scan of JHSCs ..... 17

    2.4 Impact of JHSCs on Workplace Safety Outcomes..... 17

    2.5 Attributes of Effective JHSCs ..... 18

    2.6 Health and Safety Training ..... 18

    2.7 Framework for Evaluation ..... 19

3.0 Methodology ..... 21

    3.1 Research Design ..... 21

    3.2 Design of Instruments ..... 22

    3.3 Sampling..... 23

    3.4 Data analysis ..... 25

    3.5 Scope ..... 26

4.0 Results..... 26

    4.1 Design of the JHSC Certification Training Program ..... 27

    4.2 Learning Outcomes of the JHSC Certification Training Program ..... 30

    4.3 Delivery of the JHSC Certification Training Program..... 34

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

4.4 Strengthening Health and Safety Culture and Improving Workplace Party Compliance...	36
5.0 Discussion .....	39
5.1 Design of the JHSC Certification Training Program .....	39
5.2 Learning Outcomes of the JHSC Certification Training Program .....	40
5.3 Delivery of the JHSC Certification Training Program.....	42
5.4 Strengthening Health and Safety Culture and Improving Workplace Party Compliance...	43
5.5 Comparative Lens .....	44
6.0 Recommendations.....	45
Recommendation # 1: Part Two Learning Outcomes .....	46
Recommendation # 2: Amending the Refresher Course Requirement .....	46
Recommendation # 3: Blended Learning (eLearning).....	47
Recommendation # 4: Private Training Providers .....	48
Recommendation # 5: Relevant Hazards for Part Two Course Learning Outcomes.....	49
7.0 Conclusion .....	49
References.....	52
Appendices.....	55
Appendix A- Selected Sections (Section 5 to 8) of the JHSC Certification Training Program Standard.....	55
Appendix B- Survey Participant Consent Form.....	65
Appendix C- Survey Questions.....	68
Appendix D- Interview Participant Consent Form .....	76
Appendix E- Interview Questions.....	79
Appendix F- Email to Training Providers.....	81
Appendix G- Backgrounder Included in Email to Training Providers .....	82

### List of Tables and Figures

Table 1: Legislative Requirements for JHSCs in Ontario .....	12
Table 2: Key Differences between the Original (1996) and New (2016) JHSC Certification Training Program Standard (MOL, 2015) .....	14
Table 3: Age of Survey Respondents.....	24
Table 4: Survey Results-Design Elements of the JHSC Certification Training Program, Part One Course .....	27
Table 5: Survey Results- Design Elements of the JHSC Certification Training Program, Part Two Course .....	27

RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

Table 6: Survey Results- “If you could change one thing about the design of the training program what would it be?” ..... 29

Table 7: Interview Results- Design Elements of the JHSC Certification Training Program ..... 29

Table 8: Survey Results-Appropriateness of the Learning Outcomes for the JHSC Certification Program Training Courses ..... 31

Table 9: Survey Results- Overall Learning Outcomes of JHSC Certification Training Program Courses..... 31

Table 10: Survey Results- “Please indicate how many of the hazards were relevant to your workplace” ..... 32

Table 11: Interview Results- Learning Outcomes of the JHSC Certification Training Program. 32

Table 12: Interview Results- Requirement to Cover a Minimum of Six Hazards in Part Two Training Course ..... 33

Table 13: Survey Results- “In your opinion, what were the benefits to using this mode of delivery?..... 34

Table 14: Survey Results- “In your opinion, what were the challenges to using this mode of delivery?” ..... 35

Table 15: Interview Results- Delivery of the JHSC Certification Training Program..... 36

Table 16: Survey Results- Impact of the JHSC Certification Training Program at the Workplace ..... 37

Table 17 Survey Results- Comparing the 1996 and 2016 JHSC Certification Training Program Standards..... 37

Figure 1: Evaluation Framework ..... 20



## **1.0 Introduction**

### **1.1 Project Client and Problem**

The client for this project is Jules Arntz-Gray, Director of the Training and Awareness Branch (TAB) at the Ontario Ministry of Labour (MOL), Prevention Office. As an integral part of the Prevention Office, TAB is the lead on prevention-based programs focused on quality training, raising awareness and improving occupational health and safety culture (Government of Ontario, 2017). TAB is responsible for the development, implementation and management of both mandatory and voluntary workplace health and safety training and other prevention based occupational health and safety programs (Government of Ontario, 2017). The subject of this research project, the new Joint Health and Safety Committee (JHSC) Certification Training Program Standard, was developed by TAB. Under the Director's leadership, TAB is charged with administering the JHSC certification training program on an ongoing basis.

Under Ontario's Occupational Health and Safety Act (OHSA), workers and/or employer representatives who want to be certified JHSC members in their workplaces must complete JHSC certification training (MOL, 2016). This training must be delivered according to the MOL JHSC certification training program standard and by an MOL approved training provider for JHSC certification training (MOL, 2016). On March 1, 2016, the MOL introduced a new JHSC certification training program standard, this was the first time that the standard had been changed since 1996 (MOL, 2015). As of July 2017, 41 unique training providers were delivering approved JHSC Part One and Two certification training courses across Ontario under the new training standard and over 20,000 learners had taken the new training (MOL, 2017). However, despite the amount of workers already trained under the new standard, the Ministry is not fully informed of its impact on JHSC training across the province.

### **1.2 Importance and Need**

In 2015, there were 476 injury claims made to the Workplace Safety and Insurance Board<sup>1</sup> (WSIB) each day by workers in Ontario (MOL, 2016). Over the course of the full year, 173,703 injury claims were made to the WSIB, 51,570 of which resulted in workers missing time from work and there were 226 work-related deaths in the province (MOL, 2016). Aside from the obvious costs of lives and personal loss that come from workplace injuries, illnesses or deaths, there are also economic costs to comprehend. It is challenging to quantify the exact economic costs; but for perspective, benefit payments by the WSIB to compensate workers and their families totalled \$2.67 billion in 2012 (MOL, 2013, p. 7).

Enshrined in Ontario's Occupational Health and Safety Act (OHSA) is the concept of the internal responsibility system (IRS) for each and every workplace (MOL, 2013, p. 9). The IRS means that everyone in the workplace has a role to play in keeping workplaces safe and healthy

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<sup>1</sup> The Workplace Safety and Insurance Board is an independent agency of the MOL that administers compensation and no-fault insurance for Ontario workplaces (WSIB, 2017)

to avoid workplace injuries, illnesses, and fatalities (MOL, 2013, p. 9). For example, workers in a workplace who see a health and safety problem such as a hazard or contravention of OHSA, have a duty to report the situation to the employer or a supervisor (MOL, 2013, p. 9). On the other hand, employers and supervisors are required to familiarize and educate workers with regards to any hazard they encounter in the work they do (MOL, 2013, p. 9). To help ensure that all workplace parties can actively contribute to and maintain an effective IRS, most workplaces in Ontario, based largely on the size of their workforce, are required to either have a Health and Safety Representative (HSR) or JHSC (MOL, 2013, p. 9). To that end, HSRs and JHSCs play a major role in ensuring that Ontario workplaces are healthier and safer, so all workplace parties can avoid injuries, illnesses, and fatalities.

For JHSCs to be effective in making workplaces healthier and safer, they need proper education and training (Yassi et al., 2013, p. 424). That is why it was crucial for the MOL to ensure that consistent, high quality JHSC training is taking place across the province. The MOL took the important step of introducing a new training program standard to ensure this would happen, but to see if their efforts are having a real impact, an evaluation is necessary. According to the project client; given that it has been over a year since the new JHSC training program standard came into effect and the ministry has approved many providers and certified many learners; it would be an opportune time for the ministry to understand how the new program is working and if necessary, address any issues. An evaluation would also reveal if the new training program standard is addressing the concerns raised about the training program through internal and public consultations that took place in 2010 (WSIB, 2010).

### **1.3 Project Objectives**

The overall objective of this project is to evaluate the MOL's changes to the JHSC Certification Training Program Standard. An evaluation will reveal whether the updated training standard has met the objectives that the MOL set out to achieve when making the changes to the program, that is; to "strengthen the common, consistent, foundational training requirements for all certified JHSC members".

The project sets out to answer the following research questions:

- Have the MOL's changes to the JHSC Certification Training Program Standard met their objectives?
  - Are learners and instructors satisfied with the new design requirements (e.g. adult learning principles, minimum duration requirements, etc.) for the Part One and Part Two JHSC certification training courses and are the requirements being consistently implemented?
  - Are the learners and instructors satisfied with the new learning outcomes for the Part One and Part Two JHSC certification training courses and are the learning outcomes being consistently met?
  - Are learners and instructors satisfied with the new blended learning model (i.e. combination of eLearning and in-person learning), for course delivery under the new standard?

- What are learner’s and instructor’s overall feelings towards the new JHSC certification training program standard?
- Are learners applying the content and knowledge gained from JHSC training courses in their workplace?

### 1.4 Background and Context

**Ontario’s Occupational Health and Safety Act (OHSA).** OHSA is Ontario's foundational legislative framework for workplace health and safety (Government of Ontario, 2017). The main purpose of OHSA is to protect workers from health and safety hazards at their workplace in the province of Ontario (Government of Ontario 2017). It sets out duties for all workplace parties (workers, employers, supervisors etc.) and rights for workers (Government of Ontario, 2017). It also establishes procedures for dealing with workplace hazards and provides for enforcement of the act where workplaces or workplace parties are not in compliance with it and its regulations (Government of Ontario, 2017). As mentioned above, fundamental to the successful working of OHSA is the concept of the IRS, which also sets the stage for JHSCs (Government of Ontario, 2017).

**Joint Health and Safety Committees.** A JHSC is a requirement under the OHSA for certain qualifying workplaces as prescribed under the Act and its regulations and must be composed of both worker and employer representatives (Government of Ontario, 2017)). Table 1 outlines the legislative requirements for JHSCs in Ontario (Government of Ontario, 2017).

Table 1: Legislative Requirements for JHSCs in Ontario

# of Workers Regularly Employed at the Workplace	Legislative Requirements (OHSA)
6 to 19	If a designated substance regulation applies to your workplace, you are required to have a JHSC, but there is no requirement to have certified members.
20 to 49	Workplaces are required to have a JHSC. The committee must have at least two (2) certified members (with some exceptions), one representing the employer and one representing workers. At least half of the total number of committee members must represent workers (only applies to certain farming operations as specified in regulation).
50 +	Workplace are required to have a JHSC. The committee must have at least four (4) members, two representing the employer and two representing workers and at least half of the total number must represent workers.

As outlined in Table 1, all workplaces that regularly employ 20 or more workers are required to have a JHSC, as well as those workplaces where the designated substance regulation

applies (a designated substance is one that is known to be particularly hazardous to the health and safety of workers, but while a JHSC is required, certification is not if there are less than 20 workers) (Government of Ontario, 2017). Workplaces in Ontario with between 6 to 19 workers but where no designated substance regulation applies are required to have a health and safety representative instead of a JHSC. (Government of Ontario, 2017). A JHSC is an internal check of the IRS that must be composed of worker and employer representatives working together (Government of Ontario, 2017). The role of JHSCs includes; identifying potential health and safety issues in the workplace and bringing them to the employer's attention, raising awareness of health and safety issues in the workplace and making written recommendations to the employer for the improvement of workplace health and safety (Government of Ontario, 2017). JHSCs hold regular meetings and conduct regular workplace inspections (Government of Ontario, 2017). The OHSA lays out more detailed requirements regarding JHSCs such as committee composition, JHSC meetings, member appointments and more (Government of Ontario, 2017).

**JHSC Certification Training and Certification Training Program Standard.** OHSA requires that at least two members of a workplace's JHSC in workplaces with 20 or more workers (one representing workers and one representing persons who exercise managerial functions) be certified through completing Parts One and Two of the mandated JHSC certification training program (Government of Ontario, 2017). Part One provides a basic, overall knowledge of health and safety that applies to all workplaces (Government of Ontario, 2017). This could include; an overview of health and safety legislation, worker's rights and responsibilities, employers' duties and how to identify workplace hazards (Government of Ontario, 2017). Part Two is focused on specific workplace hazards and aims to give learners the knowledge of what to do when they encounter a hazard in the workplace (Government of Ontario, 2017).

As introduced above, JHSC (Parts One and Two) certification training must be delivered according to the MOL certification training program standard (See Appendix A for selected sections of the JHSC certification training program standard). Prior to the changes to the JHSC certification training program standard in 2016, the JHSC certification training program standard had not been changed since 1996 (MOL, 2015). In fact, only Part One training even had a standard, while Part Two did not. There was a guideline developed by the WSIB for how to operate a Part Two training course, but not an actual standard to uphold.

Between 2009 and 2010, the WSIB undertook a comprehensive review of their JHSC Certification Training Program due to government and stakeholder concerns about inconsistent training quality and inadequate Part Two training across the province, which were seriously impacting the effectiveness and standing of JHSCs overall (WSIB, 2010, p.3). Following the review, WSIB developed a new training program standard to address the issues (MOL, 2015). However, this standard did not get implemented immediately as the mandate for JHSC certification training in Ontario moved over to the MOL, interrupting this process (MOL, 2015). In 2011 the MOL's Prevention Office took over (discussed in more detail below) the effort started by the WSIB and formalized an approach for a new certification training program

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

standard (MOL, 2015). The key changes to the JHSC Certification Training Program that came into effect in March 2016 are outlined in the Table 2 below (MOL 2015).

Table 2: Key Differences between the Original (1996) and New (2016) JHSC Certification Training Program Standard (MOL, 2015)

<b>2016 JHSC Training Program Standard</b>	<b>1996 JHSC Training Program Standard</b>
Part One training must include three days (19.5 hours) of face to face learning.	No minimum time requirements for Part One
Part One training can include one-third or 6.5 hours of eLearning, with the remaining to be taken in-person (“blended learning)	eLearning was an option for JHSC certification training courses, but standards for eLearning or a specific delivery model involving eLearning was not specified
JHSC certification training program standard includes design principles, learning outcomes, delivery etc. for Parts One and Two Training	JHSC certification training program standard included design principles, learning outcomes, delivery etc. for Part One Training, Part Two only had a guideline
Part Two training course must be at least two days or 13 hours and must be completed within 6 months of Part One training (a one-time extension due to extenuating circumstances may be granted)	Part Two training course had no minimum time requirements in place
Part Two training course must include training on a minimum of six workplace specific hazards that are relevant to the committee member’s workplace	Part Two training previously only had a guideline with no minimum number of hazards to be covered in training
Certified members under the standard are required to take a Refresher Training course every three years (exemptions may apply)	No Refresher Training course requirement

Table 2 above outlines some of the major changes to JHSC certification training that came into effect with the new standard (MOL, 2015). However, there are other changes that may appear as minor but were specifically added to the new standard to improve the quality of training programs. For example, the new training standard added two important required design elements to for the Part One and Two courses:

- use of a variety of teaching aids such as audio-visuals, equipment, safety devices and measuring/monitoring equipment; and
- programs to include a high degree of interaction between the learners and instructors and must ensure active participation in the training through activities such as case studies, role play, group work, assignments, discussion groups (including electronic formats) and presentations (MOL, 2015).

While the original 1996 (Part One) Standard did “encourage” training program courses to have opportunities for feedback and interaction and include a variety of teaching aids; the new standard goes further to enhance the experience for learners.

**Ontario Ministry of Labour Prevention Division.** Established in 2011 under an amendment to OHSAA, the MOL’s Prevention Division is led by the Chief Prevention Officer (MOL, 2011). The Prevention Office is responsible for the establishment and implementation of a provincial occupational health and safety strategy and the development of province-wide training and safety standards (including setting training and safety such as the JHSC certification training program standards) (MOL, 2011). The Prevention Office is also accountable for working with Ontario's health and safety system partners such as government funded Health and Safety Associations, to establish and deliver prevention programs that work to reduce workplace injuries, illnesses and fatalities (MOL, 2011).

Prior to the MOL’s Prevention Division having the mandate for health and safety and prevention in Ontario workplaces, the WSIB was responsible for health and safety prevention in the province (MOL, 2010). The transfer of the prevention mandate to the MOL followed an Expert Advisory Panel (EAP) recommendation to the government that the MOL would be better positioned to take the lead on health and safety prevention and improve the alignment between all the various ministry partners that are delivering health and safety services (MOL, 2010). All 46 recommendations of the EAP were accepted by the government and the majority have been implemented since then to improve health and safety in Ontario.

### **1.5 Organization of the Report**

This report is organized into seven sections, followed by references and appendices. Section two provides an overview of the academic literature on JHSCs and other relevant concepts; as well as an explanation of the framework for evaluation that was used for this project. Section three provides an overview of the project methodology including research design and sampling. Section four provides the findings of the survey and interviews completed for this project. Section five is the discussion section, summarizing the key results from the data analysis and tying them together with the project objectives and framework. Section six provides recommendations and section seven provides a final conclusion.

## **2.0 Literature Review and Framework for Evaluation**

This section outlines the results of an extensive literature review. It provides an overview of the concept of occupational health and safety based on the academic literature and then delves into the major themes in the literature regarding JHSCs. It also touches on several themes identified in the literature regarding JHSCs and explores important pivotal papers on the subject. Finally, it also provides the framework that guided this project.

### **2.1 Literature Review**

Based on a literature search using the University of Victoria online library as well as other web-based sources such as Google and Google Scholar, it was evident that the academic literature on occupational health and safety is well-developed. This can be seen in the number of systematic reviews, considered a top form of evidence, conducted on key themes related to the topic. For example, systematic reviews were identified for each of the following key topics in the field of occupational health and safety:

- occupational health and safety enforcement tools (Mischke, 2013);
- occupational health and safety legislation and regulatory enforcement, planning and implementation (MacEachen et al., 2006);
- occupational health and safety management systems (Robson et al., 2007);
- occupational health and safety training (Robson et al., 2013);
- joint health and safety committees (Yassi et al., 2013).

Despite the breadth of literature on occupational health and safety generally, this literature review will mostly focus on the key themes from the literature on JHSCs and occupational health and safety training. However, it is also important to properly contextualize this project. Therefore, this literature review will begin with a general overview of the concept of occupational health and safety based on academic literature, and then delve into additional literature surrounding JHSCs.

### **2.2 What is Occupational Health and Safety?**

According to Alli (2008) “Occupational safety and health is generally defined as the science of the anticipation, recognition, evaluation and control of hazards arising in or from the workplace that could impair the health and well-being of workers (p. vii)”. These occupational hazards arising in or from the workplace come in many forms including; physical (e.g. falling from a height), biological (e.g. infectious diseases such as influenza) and chemical (e.g. hazardous levels of exposure to benzene) (MOL, 2016). Occupational hazards can be found in any sector from construction to industrial to mining. Occupational health and safety is not only about protecting the general well-being of workers from workplace hazards, but also about ensuring productivity, as healthy and safe workers are more likely to be better motivated, enjoy greater job satisfaction and contribute to better-quality products and services (Alli, 2008, p. 27).

The importance of occupational health and safety, protecting workers against sickness, disease and injuries, is reflected in the constitution of the International Labour Organization (ILO) and supported by all countries who accept that constitution (Alli, 2008, p. ix). The ILO is a United Nations Agency with over 187-member states (including Canada) which brings together governments, employers and workers to set labour standards, and develop policies/programs dedicated to promoting “decent” work for all women and men (ILO, n.d.). This has been the case since the ILO began operation in 1919 (ILO, n.d.).

In recent years, the scope of occupational safety and health has evolved continuously due to social, political, technological and economic changes (Alli, 2008, p. viii). For example, the introduction of new technologies in the workplace can generate new types and patterns of

hazards, exposures and risks (Alli, 2008, p. viii). Workers need to be aware of and protected from all occupational hazards, but especially those that are new and emerging, where the extent of the impact is not yet known (Alli, 2008, p. viii).

### **2.3 Jurisdictional Scan of JHSCs**

JHSCs are a requirement in every province and territory in Canada and are also common place in other countries such as the United States (US), United Kingdom (UK) and New Zealand (NZ) (CCOHS, 2016). However, just within Canada, there are varying terms for JHSCs as well as varying legislative requirements dependant on the location (CCOHS, 2016). For example, a JHSC is referred to as a Health and Safety Committee in Quebec, Occupational Health and Safety Committee in Newfoundland and Labrador and an Occupational Health Committee in Saskatchewan (CCOHS, 2016). The legislative variances across Canada's provinces and territories include items such as the requirements for which workplaces require JHSCs, the number of members required on JHSCs, training requirements and more. Nonetheless, the concept is constant; health and safety committees are designed as a forum for bringing the IRS into practice in the workplace towards solving health and safety problems (CCOHS, 2016).

The legislative requirements across Canada outlining health and safety committees mostly came into force and practice after 1980, however, the committee concept and to a greater extent the IRS, also existed in Canada before this (CCOHS, 2016). O'Grady explains that it was "a common union strategy to establish such health and safety committees through contract negotiations" (O'Grady, 2000, p.6). In fact, according to Labour Canada, by 1980, 45% of collective agreements covering bargaining units of 200 or more employees had provisions for joint health and safety committees built in them (O'Grady, 2000, p. 6). This was especially the case in the mining industry, where contractually founded joint committees were the primary model and they were subsequently the subject of the renowned *Royal Commission on the Health and Safety of Workers in Mines* (Ham Report) (O'Grady, 2000).

The Ham Report, set out four principles, one being the concept of joint health and safety committees and it also solidified the concept of the IRS. O'Grady (2000) explains that "in one way or another" Ham's internal responsibility principles, including joint health and safety committees, informed health and safety legislation in all Canadian jurisdictions (p. 2)". In fact, according to the MOL, The Ham Commission led to the coming into force of the OHSA in 1979 (MOL, 2015).

### **2.4 Impact of JHSCs on Workplace Safety Outcomes**

A key theme in the literature surrounding JHSCs is their ability to lead to an improvement in health and safety outcomes in the workplace, such as, a reduction of injuries. In a systematic review published in 2013, Yassi et al. (2013), reviewed studies from across different jurisdictions which looked at this issue (p 426). In Canada, there have been a few studies (not many) done on this theme which have shown that the presence of a JHSC in a workplace does in fact lead to improved workplace outcomes (Yassi et al., 2013, p. 426). In the UK as well, there were some studies done that have found that workplaces with JHSCs had on average fewer

injuries compared with workplaces without JHSCs (Yassi et al. 2013, p. 433). However, in the United States (US), Yassi et al. (2013) noted that studies of the association between the presence of a JHSC and injury rates have been mixed and need further evaluation; this is also the case in Australia (p. 426).

One of the challenges with observing a reduction in workplace injuries and attributing it to the presence of a JHSC is that joint committees are only one piece of the puzzle when it comes to workplace health and safety performance (O'Grady, 2000, p. 35). O'Grady (2000) explains, that while there may be empirical research stating that JHSCs can play an important role in improving workplace health and safety outcomes, "there is also broad agreement that joint committees per se do not lead to improved injury performance" (p. 36). All in all, more studies in this area are clearly needed to fill this gap in the literature and further study the impact of JHSCs on workplace safety outcomes.

### **2.5 Attributes of Effective JHSCs**

The academic literature surrounding JHSCs is also very focused on what are the key attributes that make an effective JHSC. In the systematic review conducted by Yassi et al. (2013) key attributes for JHSCs to be effective at impacting health and safety outcomes in the workplace included; empowerment of committees, training supplied to members, representation on the committee (e.g. management representation in addition to employee representation), adequate information sharing (e.g. does management receive all committee meeting minutes?), legislation and enforcement (e.g. power of committee to write provisional orders to their employer, of which they must comply) and management commitment to the committee (p. 434). Similar to the evidence on JHSC's overall impact on health and safety outcomes, there was a lack of quality studies on the actual effectiveness of certain JHSC attributes versus others (Yassi et al., 2013, p. 436). For example, is a JHSC with a stronger enforcement mandate more likely to lower injuries in the workplace than one with equal representation from the employer and employee sides? Nonetheless, the literature appears to agree that merely having a JHSC is not sufficient, rather to make any impact, it must be an effective committee which entails any number of the various attributed discussed above (Yassi et al. 2013, p. 437). More research in this area would be also beneficial for the performance of joint committees and overall workplace health and safety.

### **2.6 Health and Safety Training**

As mentioned above, the literature acknowledges that a key attribute of effective JHSCs is the training which certified and non-certified committee members receive. According to Robson et al. (2012), training is widely acknowledged as an important component of occupational health and safety programs and educates workers on how to control occupational hazards in the workplace (p. 193). Each year, employers spend time and money providing health and safety training to their employees as means to prepare their employees for practicing healthy and safe work (Robson et al. 2012, p. 193). Training in occupational health and safety can be general or basic in nature and refer too many of the same elements that JHSC certification training may consist of, such as; hazard recognition and control, safe work practices, emergency

procedures and more (Robson et al. 2012, p. 193). Occupational health and safety training can also be very specific for certain workers, for example, health workers may be trained in infection control, while construction workers may be trained in working at heights.

Little academic literature on JHSC specific training exists, however when it came to effective health and safety training from a general perspective, there is greater depth in the literature. For example, in both 2012 and 2016 systematic reviews were done on this topic. Both systematic reviews collected multiple control trial studies where training versus non-training was examined in relation to health and safety outcomes. The themes that arose from the literature on the effectiveness of occupational health and safety training, included:

- the effect of training on worker knowledge of health and safety;
- the effect of training on worker attitudes and beliefs;
- the effect of training on workplace safety behaviours.
- the effect of training on workplace health outcomes (e.g. injuries and illnesses) (Robson et al. 2012, p. 201).

While there were many studies found on these themes; not all produced enough strong evidence to show effectiveness (Robson et al. 2012, p. 203). For example, there was insufficient evidence from the studies in the literature to show that training had an impact on attitudes and beliefs as well as on health outcomes (Robson et al. 2012, p. 203). However, when it came to changing behaviours, there was strong evidence to indicate that training was effective (Robson et al. 2012, p. 203). Therefore, although there are many studies on this topic as well as important findings; there is still room to fill the gaps identified, especially considering the investment of employers into training and the potential benefits to workers.

### **2.7 Framework for Evaluation**

In 2009, the WSIB set up a committee of representatives from labour and employers groups, the MOL, JHSC Certification Training Providers, Health and Safety Associations and adult learning specialists to provide advice to the WSIB on their review of the JHSC certification training program (WSIB, 2010, p. 3). This advice was used to develop a consultation paper to solicit public comment in 2010 (WSIB, 2010, p. 3). The WSIB was looking for public feedback on how to improve the JHSC certification training program. This was the first time WSIB had undertaken such a review, acknowledging that it was time for the JHSC certification training program to be renewed.

The main themes that came out from the review committee as well as the consultation were:

- the application of adult learning principles in the training program delivery were weak;
- the required length of Part One training courses was insufficient to cover all the material in depth and ensure that interactive activities were incorporated;
- learning outcomes of Part One training were not reflective of the changing nature of workplace demands in the economy;

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

- Part Two training was inconsistent from employer to employer; employers were given too much flexibility to decide what the training would encompass (i.e. the type of hazard assessment tools) and how long it would last. Therefore, employees were not getting the necessary hazard specific training for their workplace (WSIB, 2010, pgs. 4-17).

From the findings of the review, the WSIB developed a new training program standard to address these issues and more, however, as mentioned above, WSIB did not put this new standard into place (MOL, 2015). When the MOL took over the mandate for occupational health and safety from the WSIB in 2011, including the administration of the JHSC certification training for the province, it became a priority for the MOL's Prevention Division to continue the work the WSIB started on developing a new training program standard and putting it into place. The new program standard for JHSC certification training that was finalized and released by the MOL was based on the WSIB's revamped standard that was never put into place.

Therefore, this project is framed to evaluate whether the new JHSC certification training program standard put into place by the MOL is indeed addressing those concerns found in the WSIB's initial review and consultation as well as further MOL work on the issue. The overarching objective as stated above was to "to strengthen the common, consistent, foundational training requirements for all certified JHSC members", but to achieve this, the MOL's specific objectives were to:

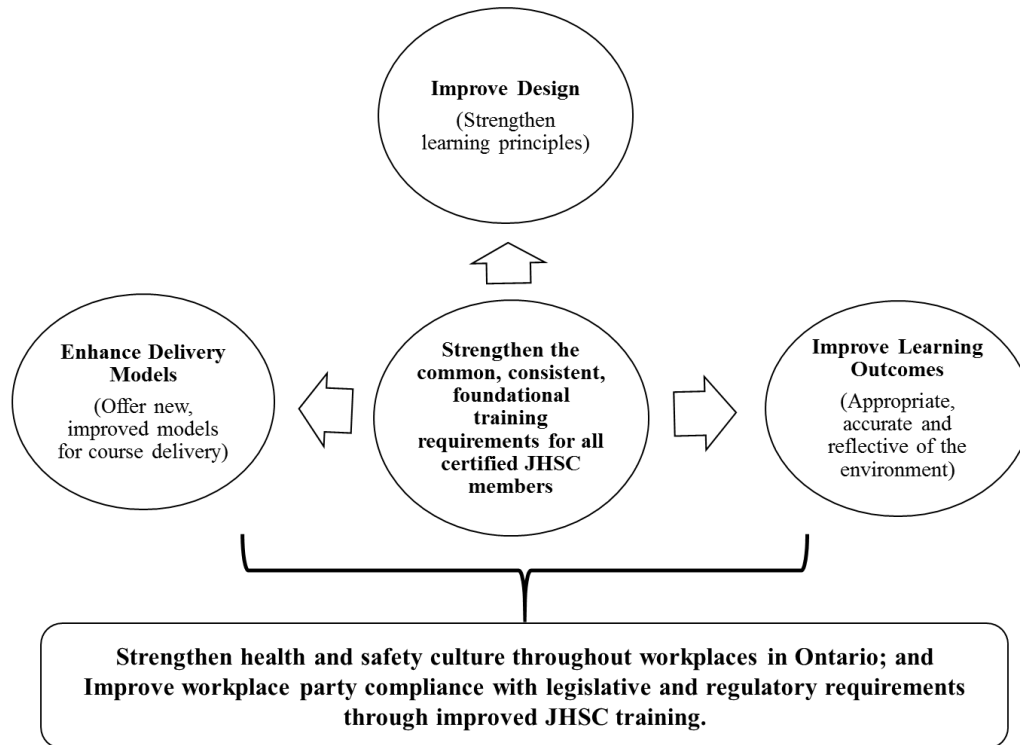
- improve the **design** of the training program (e.g. strengthen the adult learning principles required);
- improve the training programs' **learning outcomes** (e.g. ensure that the mandated knowledge of occupational health and safety law; rights, duties and responsibilities of the workplace parties etc. were up-to-date, accurate and reflecting of the environment);
- offer new, updated course **delivery models** to better cater to learner's needs (e.g. blended learning).

By improving the JHSC training program, the MOL's overarching goals in alignment with the ministry's mission, were to:

- **strengthen health and safety culture** throughout workplaces in Ontario;
- **improve workplace party compliance** with legislative and regulatory requirements through improved JHSC training.

Figure 1 below demonstrates the framework described above that forms the basis for this evaluation and guides its process.

Figure 1: Evaluation Framework



While the MOL's overarching strategic goals may be difficult to measure and attribute to any one factor, this project aims to reveal insights into whether these goals have in fact begun to take shape as a result of the MOL meeting their JHSC training program objectives.

### 3.0 Methodology

This section outlines the research design, design of (data collection) instruments, sampling and methods of data analysis that were performed for this project. It will end with some important points about the scope of this work.

#### 3.1 Research Design

For this project, a mixed methods research design strategy was taken. In other words, quantitative and qualitative research methods were used to both gather the evidence for this project and conduct analysis (Trochim & Donnelly, 2008, p. 143). Mixed methods research is preferred because it allows a researcher to achieve the advantages and mitigate the weaknesses of both quantitative and qualitative research (Trochim & Donnelly, 2008, p. 143). Two major data collection approaches were used for this research project; one quantitative in the form of a survey and one qualitative in the form of interviews.

First, given that the researcher wanted to reach as many learners of the new JHSC certification training program as possible to get their input for an evaluation, a survey was deemed the best research tool. The experience and feedback from learners who would have

actually taken the JHSC certification courses under the new certification training program standard was deemed extremely important for the purposes of an evaluation. A survey, using mostly quantitative data questions was designed for its ability to capture large amounts of data, allowing for easy summary and analysis where appropriate for the researcher. Qualitative data was also collected in the form of some open-ended questions to give the option for survey participants to expand on their answer, however the majority of data collected was quantitative. Lastly, the survey was designed in a way that would minimize the time investment (15 to 20 minutes) for those who would be taking it, with the hope that learners would be more open to completing a shorter survey and therefore resulting in a high participation rate for the research.

To complement the information gathered from the training course participants in the survey, interviews were also held with training instructors of JHSC certification courses. Training program instructors were deemed to be subject matter experts in this case, as they are clearly immersed in the training program on a frequent basis and see it from a unique lens. Furthermore, it was likely that the training program instructors could offer a valuable comparative viewpoint, given that there would likely be instructors who had taught the program under the new and original training program standard. The interviews were qualitative in nature, gathering entirely qualitative data. Qualitative data excels at “telling the story from the participant’s view”, which is exactly what this project was hoping to achieve from tapping into the views of experts on this issue (Trochim & Donnelly, 2008, p. 143). Since subject matter experts were the ones being interviewed, there was no intention of reaching a large population, therefore qualitative interviews were indeed a feasible option.

### **3.2 Design of Instruments**

**Survey.** For permission to operate the survey, a full application for ethics approval was submitted to the University of Victoria’s Human Research Ethics Board (HREB). The application was approved by the HREB in June 2017. Following HREB approval, the survey was inputted into an online survey tool hosted by Fluid Surveys. An online survey tool was preferred for its ease of use, clear format and structure options, ability to distribute widely and its ability to collect data that can then be extracted for analysis. This was the only format offered for participants to complete survey. The participant consent form (See Appendix B for participant consent form) was included as the first page of the survey.

The survey was largely made up of structured, Likert response format questions, with a few open-ended, unstructured questions scattered throughout, to afford the respondent the option to expand on certain details (See Appendix C for survey questions). A structured response format was chosen for the survey as it would allow the respondents to respond more easily and also help the researcher collect and analyze data more efficiently (Trochim & Donnelly, 2008, p. 108). The former was especially important to incentivize survey participants to take part in an “easy to complete” survey. The questions were all designed by the researcher. They were designed to focus on all elements of the research questions of this project (e.g. design, learning outcomes etc.) and align with the evaluation framework guiding this project. To test the questions and survey tool, staff at the MOL Prevention Office were asked to review a draft of the questions and

test out a non-live version of the survey in the online program. The test responses were later removed so as not to be counted in the data analysis.

**Interviews.** Just as with the survey, for permission to conduct the interviews, a full application for ethics approval was submitted to the University of Victoria's HREB. The application was approved by the HREB in June 2017. Interview questions were submitted as part of the application to the HREB. The interview questions (See Appendix D for interview questions) were all open-ended questions, designed by the researcher to enable respondents to elaborate on their answers, but also afford the interviewer the opportunity to probe further when it was appropriate to ensure that substantial and valuable feedback was captured. As done with the survey, the interview questions were designed to align with the project's research questions as well as the evaluation framework guiding this project. To test the interview questions, staff at the MOL Prevention Office were asked to review a draft of the questions. Interviewees were all emailed a participant consent form (See Appendix E for interview participant consent form) prior to the interview taking place.

### 3.3 Sampling

**Survey.** To disseminate the survey, the decision was made to request MOL approved JHSC certification training providers to inform their training course participants about the research project and directions for how to participate in the survey. Although, the MOL has a database containing contact information on all those who have completed the new JHSC training program, due to privacy concerns expressed by the Legal Division of the MOL, the researcher was not permitted to use that database to contact learners for the purposes of this research (i.e. to take the survey); therefore, an alternative method was required. This was a key limitation for this project because it limited the size of the survey sample- as of July 2017 the MOL database held contact information for over 20,000 learners who had taken JHSC certification training under the new certification training program standard. (MOL, 2017). Since an alternative method had to be used to send out the survey (which relied entirely on external parties- the training providers), it was too difficult to reach this entire population.

The request to approved JHSC training providers to send out the survey came from the client of this project. The client sent out an email using the MOL email listserv containing the emails of all the MOL approved training providers (See Appendix F for copy of email sent to training providers). As the Director of the TAB at the MOL Prevention Office, the client has the authority and oversight of the program to be able to interact with approved training providers. There was also a greater likelihood that if the request to disseminate the survey came from the client, training providers would be more inclined to oblige and disseminate the survey. In the email, a document with more information on the background and goals of the project as well the web-link for the survey was provided to training providers for their dissemination to learners (See Appendix G for copy of the background document attached to email to training providers). Those who were interested could then participate via the web-link. Training providers who did in fact disseminate the survey to their training participants were asked to confirm they did so. The

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

first email request to training providers was sent out on July 19, 2017. A follow up email was sent out again on July 28, 2017, to further encourage participation.

The survey was open for participants from July 19, 2017 to August 31, 2017 for a total of six weeks. Participants were able to complete the survey from a location of their choice. After August 31, 2017, the survey was closed and it could no longer be accessed. Data from the survey was accumulated by the online survey tool and later exported by the researcher for tracking and analysis.

A total 107 individuals responded to the survey. Of the 107, 77 of the responses were complete, while 30 were incomplete. This gave the survey a completion rate of 72 percent. Given the lack of reliable data available from the incomplete surveys, these surveys were disqualified from the analysis. Unfortunately, when it came to the response rate, the statistics were not as clear. The email request sent from the project client to the MOL listerv of approved JHSC training providers to ask their assistance in distributing the survey was sent to 41 providers. These providers were asked to confirm if they would be distributing the survey for participation and if so, how many people did they distribute (via email) the information to. Unfortunately, out of 41 providers, only six confirmed and provided the number of emails they sent out about the survey. In total, the six confirmed providers sent out 242 email requests to participate in the survey. Based on this information the response rate for the survey was 32 percent. However, this response rate assumes that those providers who did not confirm with the project client did not send any information about the survey to their current or past training participants. The response rate, without this assumption, is likely lower.

Of the total respondents, 61 individuals had taken the Part One and Two courses of the new JHSC Certification Training Program, 15 had only taken Part One and one had taken only Part Two. 34 indicated that they took the JHSC Certification Training as an employer representative, while 43 indicated that they took the JHSC Certification Training as a worker representative. Respondents were also asked whether they work in a unionized environment, 65 percent indicated they do while 35 percent indicated they did not. Lastly, Table 3 shows the age range breakdown of the respondents:

Table 3: Age of Survey Respondents

<b>Age Range</b>	<b>Total Respondents</b>
14-24	0
25-34	12
35-44	24
45-54	28
55+	13
Total	77

**Interviews.** Like the survey, to recruit instructors for interviews, the decision was made to request MOL approved JHSC training providers to inform their instructors about the research

project. In the same email that was sent by the client to the MOL email listserv of approved JHSC training providers requesting they disseminate the survey, they were also requested to inform instructors about the interviews and directions for how to volunteer for an interview. To volunteer for an interview, training program instructors were asked to contact the researcher via email. Once interested instructors would contact the researcher with a request to participate in an interview, the researcher would work with the interested party to set up an interview time at the convenience of the interviewee. Since subject matter experts were the subject of the interviews and the interviews were meant as a complement to the survey data, there was no intention of reaching a large population. Interviews were all done over the phone due to travel and time restrictions of the researcher. Interviews were set for 30 minutes each. The researcher recorded notes on a personal computer during the interview. Interviews were held between July 26<sup>th</sup>, 2017 and August 31<sup>st</sup>, 2017 to be parallel with the survey process.

A total 13 JHSC certification training program instructors were interviewed for this research project. 18 contacted the researcher to volunteer to participate, but due to various reasons including inability to find an amenable time and the contact occurring outside of the data collection timeframe, not all the volunteers took part in interviews. To put this in context, as of August 2017, there were an estimated 320 JHSC certification training instructors in Ontario. Interviews with 13, represents four percent of all instructors. Of the 13 interviewees, seven instructors worked at private, for profit training organizations and six worked at MOL funded, non-profit health and safety associations. The years of experiences amongst the training instructors interviewed ranged from as much as 20 years to six months. All of the individuals interviewed began giving courses under the training standard immediately after it came into effect. Finally, 12 of the 13 interviewees had taught courses under the original and new standard; this offered a valuable comparative lens.

### **3.4 Data analysis**

Once data and information were collected as described above; the next steps were to organize and analyze it. The methods used for data analysis differed between the data collected from the survey and the data collected from the interviews. The following sub-sections will discuss the analysis methodology for each of the data collection methods used.

**Surveys.** As noted above, the online survey tool used for this research collected all the data inputted by the participants of the survey. Therefore, once the survey was closed for participation, the data was exported by the researcher from the survey tool and placed into an excel document for organization. Before beginning analysis, there was a need to organize (“clean up”) the data in the excel spreadsheet. For example, the survey collected data from participants who completed the survey, but also left the survey incomplete; therefore, data from the incomplete surveys needed to be separated out from the completed surveys. There was also data collected by the survey tool that was not relevant to the research such as the time of day the survey was done. This and other non-relevant data was removed before beginning analysis.

Given that the data gathered from the survey was largely quantitative in nature, quantitative analysis methods were used to analyze the data. First, descriptive statistics were

used to capture all the responses for each of the Likert response format questions. Once counts were completed, the percentages of each response (per question) were also computed. However, as mentioned above, there were also some open-ended questions embedded in the survey to probe the participants further which produced qualitative data. In these cases, the qualitative data was analyzed using thematic analysis. First, for this analysis the qualitative data from the open-ended questions was exported to excel from the survey tool along with all the rest of the survey data. The qualitative responses per each open-ended question were then combed through to develop codes (i.e. highlights of the data that are pertinent). The codes developed for each response were then reviewed to identify common themes across all the responses per question. The researcher then was able to develop counts of themes for each question.

**Interviews.** As noted above, the researcher took detailed notes during each interview. A document containing the interview questions was used as a template for note taking; this allowed the researcher to easily organize notes according to each question asked during the interview. Given that all the information gathered was qualitative in nature, a qualitative data analysis approach was taken. Just like the method of analysis used for the open-ended survey questions, thematic analysis was also used to analyze the information gathered from the interviews. The process for the thematic analysis of the interviews was the same as the one used for the qualitative data in the survey; utilizing coding and generating themes and corresponding counts

### 3.5 Scope

It is important to also note that the JHSC Certification Training Provider Standard, which outlines the criteria training providers must meet to be approved by the MOL Chief Prevention Officer to deliver an approved training program, were out of scope for this evaluation. This means, that for each training program participant who took part in the survey, it was assumed that they took their training with a training provider of equal quality (in other words- providers are equally meeting the training provider standard). This was a reasonable assumption, given that providers must be approved to operate by the MOL and reasonable efforts (e.g. required annual reports) are made by the MOL to ensure that the criteria set out in the provider standard are maintained by training providers (MOL, 2016). This allowed the survey to focus on just the training program standard, ideally eliminating the quality of the training provider as a factor. Additionally, the JHSC Refresher Course was also out of scope for this evaluation. Given that it has not been three years since the new training standard has been in place, no one would technically qualify as of yet for the refresher training requirement, except in very limited special circumstances.

## 4.0 Results

The survey and interviews for this project were designed to align with the objectives stated in the framework for evaluation and the project's research questions. On that note, the survey and interviews were broken down into the following sections:

- design of the JHSC Certification Training Program;
- learning Outcomes of the JHSC Certification Training Program;

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

- delivery of the JHSC Certification Training Program;
- strengthening Health and Safety Culture and Improving Workplace Compliance.

For ease of reporting the results, the following section will be broken down according to the headings above; survey and interview findings will be reported on for each.

### 4.1 Design of the JHSC Certification Training Program

**Surveys.** The first major section of the survey focused on the design elements of the new certification training program. Respondents were asked to indicate whether they agreed that the JHSC certification training course(s) they took, either Part One, Part Two or both (depending on which courses they took), reflected the design elements that are required for each under the new certification training program standard. Tables 4 and 5 break down the results for this section:

Table 4: Survey Results-Design Elements of the JHSC Certification Training Program, Part One Course

<b>The JHSC Certification Part One Training Course ...</b>	<b>Strongly Agree (n)</b>	<b>Agree (n)</b>	<b>Neither Agree nor Disagree (n)</b>	<b>Disagree (n)</b>	<b>Strongly Disagree (n)</b>
Used an appropriate literacy level	39.5% (30)	59.2% (45)	1.3% (1)	0	0
Used helpful teaching aids (e.g. audio-visuals, safety devices and measuring equipment)	34.2% (26)	55.2% (42)	5.2% (4)	5.2 (4)	0
Included a lot of interaction between the training participants and instructors	57.9% (44)	35.5% (27)	5.2% (4)	1.3% (1)	0
Related learning to my own workplace experience	38.2% (29)	47.4% (36)	6.6% (5)	7.9% (6)	0

Table 5: Survey Results- Design Elements of the JHSC Certification Training Program, Part Two Course

<b>The JHSC Part Two Certification Training Course ...</b>	<b>Strongly Agree (n)</b>	<b>Agree (n)</b>	<b>Neither Agree nor Disagree (n)</b>	<b>Disagree (n)</b>	<b>Strongly Disagree (n)</b>
Used an appropriate literacy level	41.9% (26)	51.6% (32)	6.5% (4)	0	0

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

Used helpful teaching aids (e.g. audio-visuals, safety devices and measuring equipment)	33.9% (21)	56.5% (35)	4.8% (3)	4.8 (3)	0
Included a lot of interaction between the training participants and instructors	56.5% (35)	30.6% (19)	11.3% (7)	1.6 (1)	0
Related learning to my own workplace experience	41.9% (26)	40.3 % (25)	8.1% (5)	9.7 (6)	0

The results from the tables above reveal that an overwhelming majority of respondents either ‘strongly agree or agree’ (an average of 90 percent combined for both Part One and Part Two courses) that the design of the course(s) they took, reflected the required design elements of the new JHSC certification training program standard. The only question where there was a recognizable hint of disagreement was for the “related learning to my own experience” design element of the Part 2 course. Nearly 10 percent of respondents felt that the course did not relate to their own workplace experience. For the results above, an analysis was also done to investigate if there were any significant differences in responses between learners who took the training as a labour or employer representative, as well as learners working in a union versus non-unionized organization; no significant differences were found.

Respondents were also asked the following open-ended question: “If you could change one thing about the design of the training program what would it be? This question was not mandatory; therefore, the total response count does not reflect the number of total responses to the survey. Table 6 breaks down the most common themes found in the responses. The most common theme seen in the responses was “more time is required to get through all the material”. The following quotes from survey respondents explained this issue as follows, “*have more time to delve into the specifics*”; “*Add more days of teaching. It felt like there was so much info to cover*”, and “*Add an extra day of training specific to Job Hazard Analysis and Accident Investigations*”. The next most common theme spoke to the course materials- “improve the accessibility and usefulness of course materials”. To be specific, some interviewees explained this issue as follows, “*Bilinguism [sic]. The French edition updated Green Book is never out in a timely manner*” and “*Simple, easy to understand worksheets with clearer objectives. Somewhat confusing at times [sic]*”. The third most common theme that came across “not useful/relevant enough for all sectors (Part Two)” was perhaps more appropriately related to the learning outcomes of the training course but is important to highlight nonetheless. One respondent explained as follows, “*The courses are not particularly useful for an office (especially tech). It felt like a waste of time.*” Another respondent echoed these sentiments,

*“An introduction to JHSC for employees that are administrative instead of in the field. To clarify, the language used in both courses were very, very specific to Construction. The students who were field workers were well educated in things like soffit and scaffolding.*”

*As an administrative employee, there were numerous questions and scenarios that I struggled with simply because my area of expertise is accounting.”*

Table 6: Survey Results- “If you could change one thing about the design of the training program what would it be?”

<b>Theme</b>	<b>Response Count (number of mentions)</b>
More time is required in the courses to get through all the material	9
Improve the accessibility and usefulness of course materials	7
Not useful/relevant enough for all sectors (Part Two)	5
Less than the minimum required time is needed to get through all the material	4
Greater need to focus on how a JHSC meeting is run	3
Allow for the opportunity to have Part One and Part Two courses back to back or required to be completed in closer proximity to each other	3
Ensure that the use of technology is better integrated into courses	2
Greater focus on how to conduct workplace investigations	2

**Interviews.** In the first section of the interviews, interviewees were asked up to four questions about their feelings and observations of the design requirements of the new JHSC certification training program. Table 7 below summarizes the key themes that emerged from the answers given.

Table 7: Interview Results- Design Elements of the JHSC Certification Training Program

<b>Theme</b>	<b>Response Count (number of mentions)</b>
The design of the new training program allows for increased interaction between the instructor and the learners	7
The design of the new training program enables a great opportunity for learners to collaborate and learn from each other	5
The design of the new training program is too prescriptive/limiting for instructors.	3
The design requirements are very onerous on the provider when developing the courses	2
Three-day requirement allows for more time to cover material	2

The themes most commonly displayed in Table 7 are related to the benefits associated with the design requirements of the new training standard (i.e. increased interaction between the instructor and learners and the opportunity for learners to collaborate and learn from each other). As one of the interviewees explained, “*Our course became a lot more interactive, with break-out sessions, which is a by-product of the new standards; some students have become more comfortable (even those who feel they may know the least about occupational health and safety)*”. Another interviewee added, “*There is definitely more opportunity to talk one another*”.

*(learners), I really like how the group jells more and comeradory [sic] that happens, people feel comfortable with each other.”*

However, there were other key themes that emerged that related more to the disadvantages with the design of the new program such as it being “too prescriptive” and “onerous” on the instructor teaching the course and the provider developing the course, but these themes were less commonly referenced amongst the interviewees. For example, one interviewee explained, “*From the design perspective, as a teacher and designed, it is extremely onerous to ludicrous*”. Similarly, another interviewee lamented, “*we cannot take as many liberties under the new program*”. Lastly, there were a variety of other comments that did not emerge as common but were significant nonetheless. For example, the following quotes were each mentioned by interviewees, but are noteworthy as they contradict some of the more common themes: “*From an employer perspective, I think a total of five days of training is too long.*”: “*A new challenge with increased interaction and group activities is making sure that participants are using their time appropriately.*”

### **4.2 Learning Outcomes of the JHSC Certification Training Program**

**Surveys.** The second section of the survey focused on the learning outcomes of the JHSC Certification Training Program. First, for each course they took, respondents were asked to indicate whether they acquired key learning outcomes; five from Part One and two from Part Two (chosen directly from the new certification training program standard). For Part One learning outcomes, when asked to indicate on a five-point scale from “strongly agree” to “strongly disagree”, whether they acquired a specific learning outcome (e.g. I understand the JHSC certification process); an average of 95 percent either strongly agreed or agreed for all five Part One learning outcomes. Similarly, out of the two learning outcomes asked of respondents for Part Two (e.g. I can apply the recognition, assessment, control, and evaluation (RACE) principles to a workplace hazard), an average of 95 percent either strongly agreed or agreed that they acquired the learning outcomes.

On a more general level, under this section of the survey, respondents were also asked a question to help the researcher determine if the learning outcomes for each course were appropriate and if the overall learning goals of the courses were being met, see Table 8 and Table 9 for full results. For Table 8, 100 percent of respondents found the learning outcomes either very appropriate or appropriate for Part One and 93.5 percent found the same for Part Two. When it came to whether learners felt they achieved the overall learning goals of the JHSC certification courses the results were nearly identical; for Part One, 100 percent either strongly agreed or agreed that they achieved the overall course learning goal, while 92 percent either strongly agreed or agreed that they achieved the overall course learning goal for Part Two. For the results in Table 8 and Table 9 below, an analysis was also done to investigate if there were any significant differences in responses between learners who took the training as a labour or employer representative, as well as learners working in a union versus non-unionized organization; no significant differences were found.

RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

Table 8: Survey Results-Appropriateness of the Learning Outcomes for the JHSC Certification Program Training Courses

	<b>Very Appropriate (n)</b>	<b>Appropriate (n)</b>	<b>Neither appropriate or inappropriate (n)</b>	<b>Appropriate (n)</b>	<b>Inappropriate (n)</b>
Please indicate how appropriate the learning goals were for JHSC Part One Training	39.5% (30)	60.5% (46)	0	0	0
Please indicate how appropriate the learning goals were for JHSC Part Two Training	40.3% (25)	53.2% (33)	6.5 (4)	0	0

Table 9: Survey Results- Overall Learning Outcomes of JHSC Certification Training Program Courses

	<b>Strongly Agree (n)</b>	<b>Agree (n)</b>	<b>Neither agree nor disagree (n)</b>	<b>Disagree (n)</b>	<b>Strongly Disagree (n)</b>
After completion of Part One Training, I acquired knowledge of overall health and safety	57.5% (42)	42.5% (31)	0	0	0
After completion of Part Two Training, I acquired knowledge of health hazards adaptable to my workplace?	38.7% (24)	53.3% (33)	6.5% (4)	1.6% (1)	0

Lastly, due to the new requirement added to the Part Two training course that requires each course to cover a minimum of six specific hazards, respondents were also asked the following question about their learning experience: “Please indicate how many of the hazards were relevant to your workplace”. 33 of the 62 respondents to this question, felt that the minimum amount (6) of hazards covered in their course were indeed relevant to their workplace. Table 10 presents the results. For the results in Table 10, an analysis was also done to investigate if there were any significant differences in responses between learners who took the training as a

labour or employer representative, as well as learners working in a union versus non-unionized organization; no significant differences were found.

Table 10: Survey Results- “Please indicate how many of the hazards were relevant to your workplace”

<b>Number of Hazards Relevant to the Learner’s Workplace</b>	<b>Response Count (n)</b>
0	0
1	2
2	5
3	5
4	9
5	8
6	33
<b>Total</b>	<b>62</b>

**Interviews.** Interviewees were asked several questions related to the learning outcomes required under the new certification training program standard. Firstly, interviewees were asked their opinion about the overall appropriateness of the required learning outcomes in both the Part One and Part Two courses. Table 11 below summarizes the key themes that emerged from the answers given.

Table 11: Interview Results- Learning Outcomes of the JHSC Certification Training Program

<b>Theme</b>	<b>Response Count (number of mentions)</b>
Appropriate learning outcomes for the courses	11
A lot of duplication/repetition in Part Two learning outcomes	6
The inclusion of “hazard management tool” for Part Two is very good	5
Ensuring the RACE model is incorporated into Part Two is effective (adding the “Evaluation” to original RAC is particularly helpful)	3
Learning outcomes cover all the basics	2

As detailed in the chart above, the overwhelming sentiment amongst the interviewees was that the learning outcomes were appropriate overall for both Part One and Part Two courses. However, in a more negative tone, the next most significant theme that came out from the interviews, was the unnecessary duplication and repetitiveness of content in Part Two. Six of the 13 interviewees felt that requiring courses to repeat the RACE model and practice using a hazard management tool for each of the six hazards (minimum) that are required for Part Two, was very repetitive and perhaps unnecessary. For example, one training instructor said, “*The idea of going*

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

*through the RACE process is great for every hazard module, but it can be a bit much and sound repetitive*". Another interviewee agreed and explained as follows, *"Part two doesn't work well from an adult learning point of view, a lot of repetition, we end up doing the same thing for 10 - 12 hazards"*. Another common theme, particular to the Part Two course, which was noted by five of the 13 interviewees, was the interviewees' satisfaction with inclusion of the new requirement to teach learners how to use a hazard management tool. One interviewer noted:

*"A big downfall with the old program was the hazard assessment and the new one in Part Two is better because we give them tools such as action plans to use in their workplace, share with management. Because a lot of people we train did not know this, people often call us after training for some questions."*

Similarly, as noted in the table above, interviewees also mentioned the inclusion of the RACE model as a key benefit of the new learning outcomes (despite the repetitiveness noted). As one training instructor noted, *"We used to use RAC and now we have added evaluation so that's a good change."*

Under the learning outcomes section of the interview, interviewees were also asked their opinions about the new requirement in the Part Two course- to cover a minimum of six hazards. Table 12 summarizes the common themes that came out from their answers.

Table 12: Interview Results- Requirement to Cover a Minimum of Six Hazards in Part Two Training Course

<b>Theme</b>	<b>Response Count (number of mentions)</b>
Hazards chosen by employers for Part Two are not always relevant to workplaces	5
Too difficult to tailor hazards to every workplace setting	4
Six is the right number of hazards to cover in Part Two	4

Based on the findings above in Table 12, interviewees felt that the minimum number of hazards that are required to be covered in the new Part Two course is the right amount. Nonetheless, some interviewees mentioned that they often cover more than the minimum and in the case of one interviewee, up to ten hazards are often included for Part Two. For example, according to one interviewee, *"feedback from unions is that they want at least 10 modules"*. However, the other common themes mentioned questioned whether learners are really receiving training on hazards that are relevant to their workplace and the challenge some providers face when it comes to tailoring hazards to the employment setting of the learners. A variety of reasons were given for both these challenges. For example, two of the interviewees explained that there are some sectors such as education and office administration that do not have six hazards that are truly relevant to them. Others cited business reasons why they could not cater to all employer specific hazards as classes would be too small. According to one interviewee, *"So some are, but others are not always (covering relevant hazards), for example, a software company wants to cover*

*ergonomics and workplace violence, but they can't always find six relevant for them, it is challenging.*” The comments of another interviewee may have best summed up the overall sentiment amongst interviewees when it comes the new minimum requirement to cover at least six hazards; *“It's not perfect, it's better, people used to scramble, so at least people are getting 6 hazards, not convinced that people are doing everything relevant to their industry though”*.

### 4.3 Delivery of the JHSC Certification Training Program

**Surveys.** In this section of the survey, respondents were asked questions related to the delivery of the training courses, given the new course delivery option that is included in the new certification training standard (i.e. “blended learning- encompassing eLearning for portions of Part One training). Of the 76 survey respondents who had taken the Part One course, only two had elected to take the blended learning model. Another delivery option, distance learning, was also not utilized by any of the respondents for either course as in-person training was the predominant delivery mode used for the training courses. When asked how satisfied individuals were with their mode of delivery:

- For the Part One course, a combined 97 percent of respondents were either “very satisfied” or “satisfied” with their mode of course delivery.
- For Part Two course, a combined 89 percent of respondents were “very satisfied” or satisfied”. 9.7 percent were “neither satisfied nor dissatisfied.
- For those respondents who took training using blended learning, both (2) respondents were “very satisfied”.

Respondents were also asked two open-ended questions related to the delivery options of the training courses to gather more insights from the respondents into the benefits and challenges of using the various delivery options. According to one respondent who took the blended learning model, *“mixing up the mode (of delivery) helps keep interests of the students”*. Both respondents, who took the blended learning, did not cite any challenges. Tables 13 and 14 detail the key themes that arose from the answers. Given that only two individuals had taken the new blended model, these findings are more a reflection of the benefits and challenges of in-person courses.

Table 13: Survey Results- “In your opinion, what were the benefits to using this mode of delivery?”

<b>Theme</b>	<b>Response Count (number of mentions)</b>
Interaction, networking and learning from other training participants (in-person)	45
The ability to ask questions and interact with the instructor (in-person)	30
The ability to go deeper into the course materials and use practical examples that relate to real life work experiences (in-person)	9

Table 14: Survey Results- “In your opinion, what were the challenges to using this mode of delivery?”

Theme	Response Count (number of mentions)
No Challenges	21
Travel time to get to a course (not always course availability in local areas of learners)	10
Different learning levels of participants in courses	8
Too much information to cover in person in 3 days	5
Too large class sizes	5
Too difficult to be away from the office for so long	3
Language barriers	2

To delve more into the themes from Table 14, there are a few common ones that would benefit from more elaboration. A key theme amongst the challenges faced was “travel to time to get to a course”. As one learner noted, “*No local course, 2.5-hour drive (northern Ontario in January) to receive training [sic]*”. Another one of the key challenges noted was the “different learning levels of participants in courses”. For example, according to one interviewee,

*“There are many different ways to learn, speeds in which one learns, so the disadvantage is having a time crunch and possibly having some participants not understand the program. If you go too fast, people may not understand fully, but too slow and individuals tune out [sic]”.*

Furthermore, the challenge of, “too large class sizes”, was explained by respondents as follows,

*“If the group size of students is too large the information may not be accurately absorbed”; and “If you have too many students who have too many questions, core requirements may not be taught in the manor needed or enough time given”.*

**Interviews.** This section of the interview was meant to ask interviewees their thoughts about the delivery options for the JHSC certification training courses, especially the new blended learning option. However only one of the interviewees had delivered a course using the new blended learning model, the rest had only used in-person training. According to the one interviewee who had used the new model, there is a lot repetition inherit in the blended learning model;

*“I think the way it is laid out, it’s a lot or repetition. The eLearning portion-participants are required to go through (specific learning outcomes) on their own and then in class room we go over the same thing- so its repetitive, I would prefer maybe a test up front to capture the what they learned from eLearning before doing the rest.”*

The other interviewees also provided their opinions of the newly available option, however, since they did not actually experience the blended-model, their opinions are more a reflection of their feelings towards the model (eLearning specifically) and reasons why it is not preferred. Table 15 captures the most common themes that came out from this section.

Table 15: Interview Results- Delivery of the JHSC Certification Training Program

Theme	Response Count (number of mentions)
eLearning does not allow for valuable interaction between learners	5
Challenging for learners to grasp concepts through eLearning (especially those new to occupational health and safety)	5
Too long of a gap in time from when learners take the appropriate sections via learning to when they take the rest of the course(s)	3
The content covered in eLearning is often repeated when the rest of the course is taught in person	1

The key themes noted in Table 15 to capture the interviewee’s opinions of the blended learning- eLearning option, did not shed a positive light on this delivery model. For example, as one interviewee put it, *eLearning will pose challenges to those not in classroom.*” The interviewees explained the common themes from Table 15 as follows:

- *“We have done distance learning in the past, but one of the challenges is it takes away some of the elements that are in the standards- interaction, you lose that in an online learning.”*
- *“I believe in the in-person, people learn so much more from each other.”*
- *“I am not a big fan of eLearning when it comes to even part one- not a lot of resources out there if they have questions! If they are resources or a helpline, that would help them.”*
- *“Face to face is more practical, it’s better.”*
- *“The stuff [sic] learnt on the computer is all the legislation which is the foundation, so some people may have taken it weeks ahead or some have done it a day before and some weeks before they get into classroom.”*

#### 4.4 Strengthening Health and Safety Culture and Improving Workplace Party Compliance

**Surveys.** In the final section, respondents were asked questions related to the impact of their JHSC certification training courses at their workplace. These questions were asked in alignment with the MOL’s overarching strategic goals for renewing the JHSC training program; to strengthen health and safety culture throughout workplaces in Ontario and improve workplace party compliance with legislative and regulatory requirements. Table 16 breaks down the results.

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

Across all of the questions asked in Table 16, an average of 94.4 percent either agreed or strongly agreed with the statements.

Table 16: Survey Results- Impact of the JHSC Certification Training Program at the Workplace

	<b>Strongly Agree (n)</b>	<b>Agree (n)</b>	<b>Neither agree or disagree (n)</b>	<b>Disagree (n)</b>	<b>Strongly Disagree (n)</b>
I am using the knowledge gained in JHSC training courses in my workplace	46.8 % (36)	46.8% (36)	5.2% (4)	1.3% (1)	0
I am influencing the health and safety culture at my workplace using the knowledge gained in JHSC training	51.9% (40)	41.6% (32)	3.9% (4)	2.6% (1)	0
After completing JHSC training, I am in a better position to ensure my workplace is in compliance with occupational health and safety legislative and regulatory requirements	48.1% (37)	48.1% 33	3.9 (1)	0	0

Finally, the last questions in the survey asked those respondents who had previously taken a JHSC training course under the original 1996 standard to answer some comparative questions. 26 respondents indicated that they had previously taken the Part One course under the 1996 standard. The year in which the respondents had taken the training under the original standard, ranged from 1986 to 2015. Respondents were asked their level of agreement for three questions comparing elements of JHSC certification training under the new training standard versus training under the original standard, for Part One only. Table 17 breaks down the results. While the majority, an average of 73.1 percent of respondents across each question asked, either strongly agreed or agreed, it should be noted that for each question asked, between 15.4 and 23.1 percent of respondents answered they neither agree nor disagree.

Table 17 Survey Results- Comparing the 1996 and 2016 JHSC Certification Training Program Standards

	<b>Strongly Agree (n)</b>	<b>Agree (n)</b>	<b>Neither agree nor disagree (n)</b>	<b>Disagree (n)</b>	<b>Strongly Disagree (n)</b>
The design of the JHSC Training Program has improved	23.1% (6)	53.8% (14)	15.4% (4)	3.8% (1)	3.8% (1)

The learning outcomes of the new JHSC Training Program are more appropriate for learners	26.9% (7)	42.3% (11)	23.1% (6)	7.7% (2)	0
The new JHSC training program is more applicable to my workplace	26.9% (7)	46.1% (12)	19.2% (5)	7.7% (2)	0

**Interviews.** In this section of the interview, interviewees were asked a question related to the MOL’s overarching strategic goals for renewing the JHSC training program. The question was as follows: “Following completion of the JHSC Training Program (under the new standard), do you feel that training program participants are properly positioned to apply the knowledge gained in JHSC training courses in their workplace?” Unfortunately, only five of the 13 interviewees were asked this question. This was largely due to the fact that this question was placed near the end of the interview and there was not always time to discuss it. However, all five answered yes to this question, and felt that training program participants are properly positioned to apply the knowledge gained in JHSC training courses in their workplace. The following quotes from two interviewee reflects this: *“Yes absolutely, I think more they are walking out knowing even more than they have to, people can navigate the legislation.”*; *“They came away saying now I know more than my employer”*. In addition, one interviewee touched on an interesting point, irrespective of whether learners were coming away properly positioned to apply the knowledge gained; *“I think they come away with the knowledge, but it is hard, because it is out of our scope as instructors to actually give the empowerment and authority in the workplace that they need.”*

For the final question of the interview, interviewees were asked, “would you recommend the JHSC Training Program under the new standard be re-taken by those who have already taken the JHSC training under the original standard?” 11 of the interviewees answered this question and six of them recommended that individuals who have taken JHSC certification training under the original certification training program standard should take it again under the new standard. As one interviewee explained, *“my recommendation would be to take the course again, there are still things that people tend to forget, and it is important to learn the new requirements for how to identify new hazards.* Another interviewee added, *“people have taken it 10-15 years ago and don’t remember it, we were very surprised that there was a grandfather clause<sup>2</sup>.”* Although five of the interviewees did not feel that individuals should re-take the entire program under the new standard, they all agreed that there should be a requirement for those who have taken the training under the original standard to at least take the new JHSC Refresher Course. A variety of reasons were cited for not recommending taking the course over again such as; *“I am not sure, the Act*

<sup>2</sup> JHSC members certified under the 1996 standard do not need to retake any certification training under the new standard, including Refresher Training. Refresher Training requirements only apply on a go-forward basis to JHSC members trained under the new standard (MOL, 2016)

*has been updated, but not sure it needs 3 days for everyone” and “I would say no, same content, same format, only a few additions (with the new program)”.*

## **5.0 Discussion**

This discussion section will draw together the survey and interview results outlined above with the evaluation framework and research questions for this project. It will provide a summary and analysis of the major findings and an articulation of the implications of the findings. The following subsections will be organized to align with the evaluation framework of the project.

### **5.1 Design of the JHSC Certification Training Program**

As stated above, the overarching objective that the MOL set out to achieve when developing the new JHSC certification training program standard, was “to strengthen the common, consistent, foundational training requirements for all certified JHSC members”. One of the ways the MOL tried to achieve this goal was by setting new design requirements for JHSC certification training courses. The surveys and interviews of this project investigated whether these new requirements laid out in the new JHSC certification training program standard have had any impact on JHSC certification training to date.

Based on the survey results from the questions focusing on the design elements of JHSC courses, it was very clear that the new design elements are being consistently applied across both JHSC courses. On average, 90 percent (ranging from 83 percent to 98 percent) of respondents, across both Part One and Part Two courses, felt that the design of the course(s) they took, reflected the required design elements of the new certification training program standard. This is especially important for Part Two, which did not have official design requirements previously and according to the WSIB review in 2010, training varied greatly from employer to employer (WSIB, 2010, p.7). Building on this, findings from the interviews, shed light on the biggest improvements in the JHSC certification courses from a design perspective. Interviewees, acknowledged the increased interaction between instructors and the learners; greater opportunity for learners to collaborate and learn from each other; and positive results from the new three-day requirement which allow for more time to cover important material. While some interviewees did acknowledge they had incorporated some of these design elements in their previous courses under the original standard, their feedback still revealed that the design of JHSC certification training courses has in fact improved under the new standard.

However, both the open-ended questions in the surveys and interviews, revealed areas in the new design requirements where there is still a need for improvement. For example, the most common theme among survey respondents (regarding design) was that while more required time for the courses was welcomed, more time was still required to cover all the material. Survey respondents also felt strongly that course materials needed to be improved; for increased clarity and accessibility (e.g. offer bilingual and e-copies of materials). Finally, another area for improvement that came across as a common theme in the survey was that fact that the JHSC certification training is not always relevant/useful enough to all sectors (referring to the Part Two course in particular). Survey respondents, who felt this way, worked in less hazardous sectors-

administration, support staff, education. Nonetheless, it sheds some light on an important issue that the Part Two course may need to be designed better to apply to all sectors.

The interviews also shed light on a few issues with the design requirements under the new JHSC certification training program standard. For example, some interviewees touched on the challenge of designing courses according to the new standard in order to pass MOL approval, and the back and forth on details (sometimes minor) often required. As one instructor put it, *“It’s a bit of overkill. To be required to show how each learning objective was covered in our materials can be very tedious.”* Taking it even further, one interviewee explained,

*“We had a challenging time getting it through the standard, it was less in content, more in layout/presentation. We are a power point presenter type [sic], so they require every slide to be formatted the same, and prior to that we never got such a critique from anyone. Clarity of images was also where we had issues- number of lines of a page.”*

In summary, the results from the survey clearly showed a level of consistency in the design of JHSC courses in Ontario, which was an important objective of the ministry in developing their new standard. Interview results also revealed important improvements in the design of the courses such as the increased interaction now present and the new minimum time requirements that now allow instructors to cover more material. These were both areas that were highlighted as issues in the WSIB review of the original standard. However, there are still some issues that came across from learners and training program instructors that need to be addressed to further improve the design of the JHSC certification training program.

### **5.2 Learning Outcomes of the JHSC Certification Training Program**

Improving the learning outcomes of the JHSC certification training program and the consistency to which they were applied was another key objective of the ministry. This was also an issue that was revealed in the WSIB review of the original training standard. For example, the WSIB found that the learning outcomes of the JHSC courses, prior to the new training standard, were not reflective of the changing nature of workplace demands in the economy (WSIB, 2010, p. 4). Furthermore, especially for Part Two, without a standard, consistent learning outcomes were not applied across the province (WSIB, 2010, p. 7). The survey and interviews set out to investigate whether the new certification training program standard has indeed improved the learning outcomes of JHSC training courses and enhanced their consistency.

Firstly, the survey results very clearly showed that respondents were acquiring the key learning outcomes of the new standard in their training courses. An average of 95 percent of respondents, either strongly agreed or agreed (combined) that they were acquiring all the Part One and Part Two learning outcomes they were asked about. This finding should give the MOL a strong indication that the required learning outcomes are being consistently applied across JHSC courses. Similarly, results from the surveys, should give the MOL confidence that the new standard encompasses appropriate learning outcomes. 100 percent of respondents found the learning outcomes were either very appropriate or appropriate (combined) for Part One and 93.5 percent for Part Two.

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

The interview results further corroborated these findings. The most common theme noted by interviewees when it came to the learning outcomes of the training courses, was that they were appropriate. Interviewees particularly liked the new requirement under the standard for Part Two, which requires learning about hazard management tools and the RACE model. However, a prominent theme that also came out of the interviews was how repetitive the new learning outcomes are, particularly for the Part Two course. Many of interviewees felt strongly that requiring that the RACE model be repeated for each of the minimum, six hazards that must be covered in Part Two, was quite unnecessary and took too much time.

On the topic of the new requirement for a minimum of six hazards for the Part Two program, interviewees felt that this was an appropriate minimum number. Overall, training instructors did not have any issues with six being the minimum number of required hazards to cover. However, many interviewees raised the issue that the hazards being chosen by employers (when tailoring a program to their workplace or individual staff) are not always relevant to their workplace and they were often not able to tailor hazards to each sector represented in their courses. Interestingly, the results from the survey did not necessarily reflect this interview finding, as 53 percent of survey respondents agreed that all six hazards chosen for their JHSC courses were relevant to their workplace and 14 percent felt that at least five were relevant to their workplace. In anticipation of this issue, this MOL did set out guidelines for employers (sending their employees or representatives to JHSC certification courses) to guide the selection of hazards for the Part Two training course (MOL, 2015).

Nonetheless, the interview findings acknowledge that tailoring a minimum of six hazards (to be covered in the Part Two course) to every workplace that is part of a training course can be challenging, especially for smaller, private training providers. For example, in the interviews, the instructors from smaller, private training providers, cited business reasons such as cost, as often being a factor in not being able to offer courses that tailored the hazards covered in Part Two to each learner's workplace. This does not appear to be as much of an issue at the larger, MOL funded, health and safety training associations, as a small course size would not be as financially straining and they would likely not have an issue tailoring specific hazards to small groups of learners. One interviewee from a private training company captured the issue as follows,

*“Our Part One and Part Two are public courses- so companies come in and have 1 to 4 people each, so when we make a group of up to 20, sometimes there are a lot of different employers. So to meet all the needs can be challenging, we can't tailor Part Two hazards to everyone, we need to balance it- it is cost prohibitive to cover each sector's specific hazards, courses would be too small, we'd loose money [sic].”*

In summary, the survey and interviews indeed showed that the learning outcomes outlined as requirements in the new training standard for Part One and Part Two courses are not only being consistently applied during JHSC courses, but they are also appropriate and reflective of the current health and safety environment. However, like the with the design of the new program, there are still some areas that may need to be addressed, such as the “unnecessary” repetition involved in Part Two and the challenge for training providers of ensuring learners are always receiving training that covers relevant hazards for their workplace.

### **5.3 Delivery of the JHSC Certification Training Program**

Offering new course delivery models for learners was also part of the MOL's objective to strengthen JHSC certification training. Under the new JHSC certification training standard, the MOL introduced a new model for delivering JHSC certification courses, the "blended learning model". As explained above, this model allows learners to take specific parts of the Part One course (specified learning outcomes are listed in the standard) via eLearning, with the remaining parts of the course and the entire Part Two, to be taken in-person. The survey for this project included questions inquiring about learner's satisfaction with the new option available under the new training standard, but only two of the survey respondents had even taken the new JHSC certification training program using the delivery models. This was interesting given that the survey results indicated that one of the most common challenges expressed by learners regarding the mode of delivery for their course, was travel time to get to the course. With the interviews as well, only one instructor interviewed had actually attempted to teach a JHSC certification course using the new model. However, it should be noted that there are currently only two providers approved by the MOL to deliver the blended learning option.

The two survey respondents who had experienced the new blended learning model for course delivery were both very satisfied with their experience. One of the learners explained that "mixing up" the forms of learning (between eLearning and in-person) is a benefit under the new blended learning model. On the other hand, the one interviewee who had used the blended learning model for delivery was not as satisfied. The instructor cited the fact that learners, who take the allowed eLearning portions of the JHSC Part One course, often get the same course material repeated when they are completing the rest of the course in-person. Given the minimal input (two learners and one instructor); it is hard to draw any conclusions as to whether the MOL has in fact enhanced the delivery of the JHSC training program. Nonetheless, the instructors interviewed revealed informative findings as to some reasons that eLearning is not preferred. These included; the lack of interaction between learners, challenge for learners to grasp all health and safety concepts, loss of engagement between instructors and learners and the gap between when learners take the eLearning and in-person portions of the training course.

Lastly, there were other key findings from the surveys for the MOL to consider regarding the overall delivery requirements under the training standard. One of the key challenges mentioned by learners about the in-person learning experience was related to class size. As part of the new standard, the MOL put in a requirement that class sizes must be between six and 25 students. Some learners mentioned that they felt class sizes were too large, making it challenging to learn. On the other end of the spectrum, some interviewees expressed their frustration with the minimum number of students required for a course to operate. The training states as follows,

"Training providers who anticipate it will be difficult to meet the target of six (6) to twenty-five (25) people per course must apply for an exemption to the Ministry of Labour at the time of program application, stating that they will consistently have classes of

fewer than six (6) people. Training providers must notify the Ministry of Labour in the training provider annual report of instances when a minimum class size of six (6) was not feasible, for example in remote locations.”

According to one interviewee, despite the option for an exemption, this minimum requirement (six) has likely led to- many course cancellations as not every provider has applied for the exemption. As one interviewee put it, *“I believe a significant percentage of people are asking for the 6-month extension because they are unable to find a session within their geographical area, or if they do, it's been canceled!”*

In summary, due to the very small amount of survey respondents who had the taken courses using the blended learning model and the lone interviewee who taught a course using it, it is hard to draw any significant conclusions. While the MOL has succeeded in widening the delivery options for which learners can take JHSC certification courses as recommended in the WSIB consultations, based on the findings from this survey, the new learning model has not yet gained traction. Based on the feedback provided, learners and training program instructors still feel much more comfortable with in-person learning.

### **5.4 Strengthening Health and Safety Culture and Improving Workplace Party Compliance**

In addition to improving the design, learning outcomes and delivery of the JHSC certification training program, the MOL’s overarching goals for developing the new certification training program standard were always to; strengthen the health and safety culture in workplaces and improve workplace party compliance with legislative and regulatory requirements. According to the MOL’s Occupational Health and Safety Strategy, “the extent to which there is a culture of health and safety (in a workplace) is reflected in the IRS and whether everyone in the organization has opportunities to participate in and take responsibility for occupational health and safety (i.e. complying with the health and safety legislation and regulation) (MOL, 2013, p. 36)”. As discussed earlier in this report, JHSCs play a major role in enabling workplace parties to contribute to the IRS and impact the health and safety culture in their workplace. There are a variety of tools available to measure workplace health and safety culture as well as compliance; however, this is a challenging task (The Health Foundation, 2011, p. 3). Even more so, attributing improvements in the health and safety culture or compliance at a workplace to any one factor, such as JHSCs or JHSC certification training is a difficult exercise. As discussed above in the literature review section, joint committees are only one piece of the puzzle when it comes to workplace health and safety performance (O’Grady, 2000, p. 35). Nonetheless, the survey and interviews for this project asked learners and training program instructors, questions in an effort to reveal some initial insights into how the new JHSC training program could in fact be impacting these important concepts.

Based on the survey results from the questions relating to safety culture and compliance, after completing the JHSC certification training program, learners felt they were in a better position to influence the health and safety culture at their workplace and ensure that their workplace is in compliance with occupational health and safety legislation and regulations. An

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

average of 94.4 percent of respondents either strongly agreed or agreed that they are; using the knowledge gained in JHSC courses, impacting the culture at their workplace using this knowledge; and are in a better position to ensure their workplace is in compliance with legislative and regulatory requirements. The interview findings supported the interview results even further. Although the sample for this interview question, “Following completion of the JHSC Training Program, do you feel that training program participants are properly positioned to apply the knowledge gained in JHSC training courses in their workplace?”, only included five interviewees, the results those who responded felt their learners are coming away prepared to apply their new knowledge and influence health and safety at their workplace.

Strengthening workplace health and safety culture and improving compliance were important objectives for the ministry when introducing a new training program standard. It was certainly necessary to improve the design, learning outcomes and delivery of the JHSC certification program, to strengthen training in the province. However, the MOL still needed to get a sense of whether JHSC members (workers or employers) will actually be able to make a difference in their workplace based on the new training program. While more robust measurement is required to truly assess whether the new JHSC certification training program is having a real impact on culture and compliance by way of JHSCs at the workplace, the results from this evaluation show that it is indeed headed in the right direction; as learners felt more prepared to influence health and safety culture and compliance at their workplace following JHSC certification under the new standard.

### **5.5 Comparative Lens**

In an effort to compare the JHSC training program under the new training standard with the program under the original standard; the survey and interviews asked learners and training program instructors to assume a comparative viewpoint for a number of questions. Questions were only asked regarding the Part One course, as only Part One had a true standard previously. Although the sample from the survey was small, (26 respondents indicated that they had taken JHSC certification training under both the new and original standards), the results revealed that learners felt there are clear improvements in the training program under the new standard versus under the old standard. As mentioned above in the results section, an average of 73.1 percent of respondents either strongly agreed or agreed that the new JHSC certification training program has an improved design, more appropriate learning outcomes and that the training program is overall more applicable to their workplace. The latter finding is very important when considered in the context of the MOL’s overall strategic goals discussed above, ensuring that learners are coming away from JHSC certification training prepared to apply their new knowledge to influence health and safety culture as well as compliance at their workplace. Interestingly, there was an average of 19.2 percent of respondents who neither agreed nor disagreed across all the comparative questions asked, however this could simply be due to the fact that they took the original course too along go to recall differences.

To build on the comparative questions that the survey asked of learners, interviewees were asked a more specific question that also forced them to take a comparative lens: “Would

you recommend the JHSC Training Program under the new standard be re-taken by those who have already taken the JHSC training under the original standard?” As the findings explained above, six of the 11 interviewees who answered this question recommended that individuals who had taken JHSC training under the original standard should take it again under the new standard. They cited reasons such as the need for learners to be up to date on new health and safety content such as updated legislation and regulations or new hazards; and just the mere fact that learners, who had taken training, say over five years ago, simply may have forgotten the content. However, as the findings mentioned, although the other five interviewees did not think it was necessary to take the training again, all felt that at the least, individuals certified under the original training standard should not be exempt from the new requirement to take a Refresher Course every three years. Only learners who have taken the JHSC certification training program since March 1, 2016, under the new standard are currently required to take the Refresher Course. In fact, interviewees stressed that they highly recommend and expect the MOL to remove the “grandfather” clause and ensure that all certified JHSC members are required to take the Refresher Course. As one interviewee explained,

*“People should not be automatically grandfathered without taking refresher if they have taken it 20 years ago, maybe after another 5 years MOL should do something like this to update older learners, committees can become complacent, but the new standard gives newer information, better stuff [sic]”*

The interviewees’ strong feelings that learners certified under the original standard should either re-take the training again under the new standard or at least be required to take the new Refresher Course, showed a high level of confidence that training instructors have with the quality of the training under the new standard. As one interviewee explained, *“the previous model was not stringent enough, I like that it is now with Chief Prevent Officer and not WSIB, goes hand in hand, it was too loose previously.”* Another interviewee explained,

*“I think the old part two, I am not sure people at their employers actually did this! So this is a big, big improvement. People did not go through all the stuff we do now for Part 2 [sic]”*

In summary, the opinions of the interviewees as well as the survey respondents, comparing the new JHSC certification training to the original, clearly show that the MOL’s new training standard has made real improvements to JHSC certification training in Ontario.

### **6.0 Recommendations**

Based on the findings from the survey and interviews, the following recommendations were generated. The recommendations are intended to guide the MOL in addressing challenges and areas of concern that were noted by the learners and training instructors throughout this evaluation. The recommendations are not designed to address every issue raised, rather, the recommendations touch on issues that were most commonly found as well as those that consider the JHSC certification training program standard from an overall perspective.

**Recommendation # 1: Part Two Learning Outcomes**

*The MOL should consider changing Learning Outcome 8.2.2 under Section 8.2. of the Part Two Learning Outcomes, to allow instructors flexibility in choosing the number of hazards for which they demonstrate how to apply the RACE principles to their learners.*

Based on the findings from the interviews with instructors, there were very few issues raised when it came to the learning outcomes under the new JHSC certification training standard. However, one key issue mentioned by many of the interviewees, was the “unnecessary” duplication that arises in the Part Two course, as a result of the requirement to repeat the RACE model for each of the minimum six hazards that must be covered in the Part Two course. To be specific, 8.2.2. states that learners must be able to “Apply recognition, assessment, control, and evaluation principles to each of the workplace hazard(s) selected for the training program.” Many of the training instructors felt that this was not needed and took too much time to do. In fact, one instructor explained that it was not in alignment with adult learning principles.

Although this issue was not brought up by learners in the surveys, one of the challenges that learners expressed with the design of the JHSC program under the new standard, was the lack of time in courses to cover all the necessary material. Learning outcome 8.2.2. could be one area where the MOL cuts down on the required content, this would allow instructors to focus more of the course time to other learning outcomes. Therefore, this recommendation not only would address instructor’s concerns but also a related concern of learners.

**Recommendation # 2: Amending the Refresher Course Requirement**

*The MOL should consider amending the requirement under the new JHSC certification training standard that requires learners as of March 1, 2016 to take the Refresher Course every three years, to have it also include certified JHSC members that took training before March 1, 2016, under the original standard.*

Excluded from the Refresher Course requirement are learners who have taken Part One and Part Two certification training under the original standard prior to March 1, 2016. This is where the overwhelming majority of the JHSC certification training instructors interviewed disagreed. Although the Refresher Course was not part of this evaluation, this issue came up nonetheless. The training instructors interviewed felt confident enough in the new JHSC training courses to recommend learners who had taken the training under the original standard re-take it again under the new standard or at the very least, take the new Refresher Course. In fact, some of the interviewees expressed that they expect the MOL to eventually remove the grandfather clause and require all certified learners to take the Refresher Course. Requiring the Refresher Course over the full course again was recommended because it would not require certified JHSC members to make a significant time commitment (a potential deterrent) and that not everything in the new standard needs to be covered again. Nonetheless, the interviewees felt that the new up to date health and safety information contained in the new training program and the mere fact that learners may forget things they learnt years ago were strong reasons for changing the refresher requirements.

However, prior to implementing a change to the Refresher Course requirement, the MOL will need investigate whether it is feasible and appropriate to require all learners trained under the original standard to take the Refresher Course. Important factors that must be considered include, if there should be a new across board requirement or perhaps a time limit for the requirement (e.g. only if you have taken the training more than ten years ago, would you be required to take the Refresher Course). Other considerations may include the potential burden to businesses that would again be required to send their employees or employer representatives for training. Therefore, the MOL should consult with a number of experts on the topic such as training experts and health and safety experts and also potentially consult impacted stakeholders such as employers who would be required to send their JHSC representatives to more training, as to how this change should occur.

### **Recommendation # 3: Blended Learning (eLearning)**

*The MOL should explore options to improve learner and instructor uptake of the new blended learning option for JHSC certification training courses.*

Based on the findings above, the new “blended learning” model does not appear to be a favoured option for JHSC certification training courses among training instructors. The training instructors interviewed sighted various reasons for their apprehension towards the new eLearning portion of the blended learning model, which gave the notion that it was not even considered as an option for them going forward. In fact, there are only two approved JHSC certification training providers in Ontario even offering the blended learning model. This is not surprising given the challenges that the training instructors expressed during the interviews. In addition, based on the sample of the survey, it also does not appear to a top choice for learners- only two of the 77 people who participated in the survey had taken the new blended model for their training. Although not be ignored, both survey respondents who had taken the blended learning were very satisfied with their learning experience.

However, one of the main challenges cited by survey respondents when it came to taking in-person JHSC certification courses was travel. To be more specific, the distance required to travel and the lost time incurred by learners as a result were the main issues. The obvious benefit of eLearning is that learners do not need to leave their location, be it a workplace or home, to take a training course. Furthermore, there is a large evidence base that shows the benefits of eLearning and its ability to focus on the needs of individual learners (Arkorful & Abaidoo, 2014, p. 401). While, there may still exist the challenges noted in the findings of this project, the blended learning model can still serve as a valuable and viable option for learners. Especially for those who need to travel long distances to get to an approved training provider and those workers who cannot afford the extra time away from the office. The MOL should therefore explore how to improve the uptake of the blended learning model, eLearning specifically, to continue to enhance the learning experience of JHSC certification training courses. This may require speaking with eLearning specialists and also consulting approved training providers to discuss the blended learning model and addressing their perceived challenges.

**Recommendation # 4: Private Training Providers**

*The MOL should study the impacts of the new JHSC certification training program standard on smaller private training providers versus larger MOL funded training providers (i.e. health and safety associations).*

Of the total 41 approved JHSC certification training providers in Ontario for Part One and Part Two training, 36 are private for-profit organizations and 5 are non-profit MOL funded health and safety associations. The health and safety associations are much larger entities than the other private training providers. For example, Infrastructure Health and Safety Association, an MOL funded health and safety association received 30 million dollars in funding from the MOL in 2015-16 (MOL, 2016, p. 55). The majority of these funds, as well as the funds flowed to the other four health and safety associations mentioned, are dedicated to training, albeit not just JHSC certification training. For this project, as mentioned in the findings, of the 13 training instructors interviewed, seven instructors worked at private training organizations and six worked at MOL funded, health and safety associations. Having the perspectives of instructors from both types of providers revealed important findings for this project.

During the interviews, the training instructors from private training providers raised a few issues for which they felt they were at a disadvantage compared to their counterparts from the health and safety associations. One issue raised was how smaller private training providers are not always able to cater their JHSC certification training to their specific audience. For example, as mentioned above, in order to reach the required quota to hold a training session and also make it financially worthwhile to operate a course, a smaller training provider will be required to take learners from a wide variety of sectors. This impacts learning, particularly in the Part Two course, where there is a requirement to learn about specific hazards, as one sector will likely have different hazards than the next; and because learners from different sectors may all be in one course, some learners will not benefit from the hazards that are focused on. Although it was not specifically related to the type of training provider, survey respondents also raised this issue. As noted in the findings, one of key challenges raised by learners in the design section of the survey was that training was not always relevant for their sector. This overall issue may not be as much of a concern at the health and safety associations due to their ability to cater to small groups of learners consisting of the same or similar sectors.

Another issue noted in the findings by a few instructors was the challenge in actually putting together a training program that would meet all the specific design requirements of the new training standard, as one instructor noted it was a “very onerous” process. One instructor from a private training organization felt strongly that they are at a serious disadvantage in that they have to meet all the exact same design requirements that the larger health and safety associations do. In other words, given that the health and safety associations have large training departments and deeper budgets, they are in a much better position to meet the requirements compared to a small training provider, where it may be up to one individual with limited funds.

This recommendation is not suggesting a specific change to address the concerns mentioned by the smaller for-profit training instructors. However, based on the concerns raised, there is certainly merit in the MOL looking into the impacts of the new standard for smaller

private training providers versus the larger health and safety associations. After all, the majority of providers are in fact private organizations and it would be invaluable to unintentionally create a tiered system.

**Recommendation # 5: Relevant Hazards for Part Two Course Learning Outcomes**

*The MOL should promote their “New JHSC Certification Training Guidelines for Employers” to further educate employers on how to select hazards for the Part Two training course that are relevant to their workplace.*

An important requirement under the new JHSC certification training program standard, for the Part Two course, was that it must require a minimum of six “relevant” workplace specific hazards (MOL, 2015). The issue revealed in the findings above, was with the “relevant” element of this requirement. Training instructors felt employers sending JHSC worker or employer representatives for training were not always choosing relevant hazards. Alternatively, some interviewees felt that there were not six relevant hazards out there for all workplaces. Survey respondents admitted this issue as well.

The MOL likely anticipated this issue as they released the “New Joint Health and Safety Committee (JHSC) Certification Training Guidelines for Employers” along with the new training program standard. In fact, there is a specific section entitled, “How do I select hazards for my Part Two Training?” Given that the MOL has already created a reference document that could address this issue, it is important for MOL to leverage their guide and promote it more broadly. Perhaps there is a need for greater awareness and education for employers to ensure that this issue gets fixed.

## 7.0 Conclusion

On January 31, 2018, the Ontario’s Minister of Labour, Kevin Flynn, lamented the “recent spike” in workplace fatalities in Ontario (MOL, 2018). In the same vein, the WSIB’s annual *By The Numbers* report published in 2016, reported a rise in lost-time injury claims in Ontario for the first time in the last ten years (WSIB, 2017, p. 9). While re-iterating that the workplace health and safety of Ontarians is a top priority of the MOL, Minister Flynn said the following,

*“Ontario is one of the safest places in the world to work. This is something we should be proud of, but we should never be satisfied. Only when every employer and every worker takes real responsibility for workplace safety in Ontario can we ensure our loved ones will return home safe and sound (MOL, 2018).”*

As discussed above, workplace JHSC committees are one of the most important vehicles for workers to take to participate in health and safety as called for by Minister Flynn and to ensure employers are taking their responsibility seriously as well. Workplace fatalities are still occurring and lost-time injuries are on the rise; it is as crucial as ever to ensure that all workplace parties are doing all they can to fulfil their responsibilities. This is why it was so important for the MOL to strengthen training for JHSC certification courses in the province and ensure committee members were equipped with the best training possible. Changes hadn’t been made since the

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

original 1996 standard was put into place and there were clear issues with the original standard (and lack of standard in the case of the Part Two certification course) noted by the WSIB in their 2010 review. The MOL Prevention Office therefore made it a top priority to update the JHSC certification training standard and took it on, almost immediately after being established.

The purpose of this project was to evaluate the MOL's changes to the JHSC certification training program standard. Since the MOL introduced the new certification training program standard in March 2016, an evaluation had not been done and the client was eager to see if the new changes had strengthened the common, consistent, foundational training requirements for all certified JHSC members. The researcher was able to do this by surveying learners who had taken the JHSC certification training under the new training program standard and by speaking with training program instructors who had experience teaching the new and original JHSC certification courses. This allowed the researcher to tap into the valuable perspective of both these important population groups.

Overall, the researcher found that the MOL has indeed strengthened the JHSC certification training program and also ensured that it is being consistently applied across Ontario. From the perspective of learners, the MOL can see that the new design requirements of are being consistently applied across courses. Instructors are also reporting their satisfaction with the design of the new program; especially the increased level of interaction between instructors and learners and between learners themselves that was not as evident in previously. Learners are also consistently acquiring the new learning outcomes and both learners and training instructors find the new learning outcomes appropriate, particularly the new elements required in the Part Two course with specific hazard training and applicable hazard assessment tools. A new standardized delivery model, that includes eLearning, is now being offered and despite the small sample size from this project, learners are satisfied with it. Finally, not only are learners acquiring the right learning outcomes, but based on the findings from the project, they are applying them in their workplace.

However, as noted in the discussion and further in the recommendations of this report, there are still areas that need addressing such as unnecessary repetition in certain learning outcomes, the lack of uptake for eLearning and learners not always receiving training on six relevant hazards to their workplace. Nonetheless, the researcher provided a good, early indication of the positive impacts that the new training standard is having and improvements needed. The MOL has committed to a complete review of the JHSC certification training program every five years (MOL, 2016, p. 15). The researcher's findings will not only provide a strong early view of the issues that could be addressed prior to the five-year commitment, but it could also act as a starting point for when that review occurs.

While important findings can be gleaned from this project, it should be noted that they do not come without limitations. The sample size of learners for the project survey was rather small compared to entire population of learners who have taken JHSC certification training under the new standard. As discussed above, this was largely due to legal restrictions. However, if the MOL is to expand on this research, particularly for their five-year review commitment, there is a need to investigate how to better reach learners to get their feedback. The interviews certainly

added a valuable complement to the survey results, however having a larger survey sample would also surely help bolster the findings. On a similar note, the literature review conducted by the researcher for this project showed there are a lot of gaps in the research on JHSCs and JHSC training specifically. This could be something the MOL attempts to fill through providing funding to academic researchers; it would not only fill the research gap, but also help the MOL continually improve their own JHSC training program.

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## Appendices

### Appendix A- Selected Sections (Section 5 to 8) of the JHSC Certification Training Program Standard

#### 5. Design

The training program must be designed to ensure that the learners meet the learning outcomes set out in this standard for Part One, Part Two or Refresher training.

The training program must meet the following criteria:

- a) Compliance with adult learning principles:
  - i. Ensure learners know why they need to learn specific content, its relevance to them and their workplace;
  - ii. Relate learning to learners' own experience in situations that simulate actual application in the workplace;
  - iii. Challenge learners using a variety of activities that allow opportunity for participation, feedback and interaction;
  - iv. Recognize limits of attention span and various ways that adults learn; and
  - v. Use realistic activities and tools to support transfer of learning to the workplace.
- b) Literacy level is appropriate for the learners;
- c) Content is accurate, current and all legal and technical information is referenced and verified;
- d) Use of a variety of teaching aids such as audio-visuals, equipment, safety devices and measuring/monitoring equipment;
- e) Learner materials follow principles of instructional writing and good graphic design; and
- f) Programs include a high degree of interaction between the learners and instructors and must ensure active participation in the training through activities such as case studies, role play, group work, assignments, discussion groups (including electronic formats) and presentations.

#### 6. Delivery Mode

Regardless of the delivery mode, all approved training programs must meet the requirements of this standard and the delivery mode must support the learner's ability to achieve the applicable learning outcomes.

### 6.1. Face-to-Face Learning

Minimum durations have been set for the training programs to ensure adequate time is available for program delivery.

The minimum hours for training are:

- a) Part One training - three days (or 19.5 hours)
- b) Part Two training - two days (or 13 hours)
- c) Refresher training - one day (or 6.5 hours)

Class size must be between six (6) and twenty-five (25) learners to ensure effective participation and interaction. Training providers who anticipate it will be difficult to meet the target of six (6) to twenty-five (25) people per course must apply for an exemption to the Ministry of Labour at the time of program application, stating that they will consistently have classes of fewer than six (6) people. Training providers must notify the Ministry of Labour in the training provider annual report of instances when a minimum class size of six (6) was not feasible, for example in remote locations.

### 6.2. Distance Learning

Learners have varying needs such as scheduling and location. As a result, a variety of delivery methods will be considered for approval. Distance learning is an educational situation in which the instructor and learners are separated by location. The instructor is leading the training in real-time and moving through the learning outcomes together with the learner, although not in the same physical location. Examples include webinar or video conferencing.

All distance learning requires the same minimum hours of training as face-to-face learning and must include plans for interaction with a qualified instructor.

### 6.3. eLearning and Blended Learning

eLearning combined with face-to-face learning is referred to as blended learning. Blended Learning describes the practice of using several training delivery methods in one curriculum. It typically refers to the combination of classroom instruction and any type of training that includes self-directed use of online capabilities, such as eLearning.

eLearning in this context is a wide set of applications and processes such as web-based learning and computer-based learning. eLearning is delivered electronically in which a learner sets their own pace and is not being led in real time by a qualified instructor.

Learners have varying needs such as scheduling and location. As a result, a variety of delivery methods will be considered for approval. The combination of both classroom and non-classroom delivery methods (blended learning) will be considered.

eLearning within a blended learning delivery will be permissible for up to one day (6.5 hours) of training of certain outcomes included in Part One training only. No eLearning or blended learning delivery is permissible for Part Two or Refresher training. For details on which learning

outcomes for Part One training will be considered for eLearning please refer to Section 8.1, Part One Learning Outcomes.

All eLearning components must meet the criteria in the eLearning Instructional Design Guidelines. When a blended learning course is being designed, the two sections of the course must be well integrated. All blended learning requires the same minimum hours of training as face-to-face learning.

For blended learning, evaluation in the face-to-face part of the course must support and validate that the learning outcomes covered by the eLearning portion of the course have been adequately met by the learner.

## **7. Resource Materials**

Resource materials for instructors and learners include the following:

### **7.1. Learner Materials**

Materials, with the exception of program material delivered by eLearning, must be provided to learners in hard copy. Learner materials must:

- a) Clearly describe learning objectives, agenda, training content and evaluation/testing;
- b) Clearly indicate the date and version of the materials; and
- c) Include at least:
  - i. An agenda for each session;
  - ii. Participant manual;
  - iii. Background and reference information;
  - iv. Terms and definitions;
  - v. Worksheets for learning activities, exercises, role plays and case studies;
  - vi. Job aids, tools and templates;
  - vii. References to legislation, standards and codes applicable to the training topic;
  - viii. The Occupational Health and Safety Act (OHSA);
  - ix. Ministry of Labour Guide to the Occupational Health and Safety Act;
  - x. Ministry of Labour Guide to Joint Health and Safety Committees and Representatives in the Workplace;
  - xi. Workplace Hazardous Materials Information System (WHMIS) Regulation under the OHSA; and
  - xii. Ministry of Labour Guide to WHMIS.

## 7.2. Instructor Materials

Instructor materials must:

- a) Clearly describe learning outcomes and training content;
- b) Clearly describe:
  - i. Instructional methods;
  - ii. Learning activities; and
  - iii. Lesson plan timing.
- c) Include, at a minimum:
  - i. Lesson plans with detailed step-by-step instructions to guide the instructor through the lessons, including what materials will be used to deliver the topic, the instructional methods, the learning activities, timing and equipment needed, if any;
  - ii. Presentation materials with speaker notes, such as PowerPoint slides, etc.;
  - iii. Answer sheets for the learning activities, exercises, role plays, case studies, and tests; and
  - iv. Audio-visual resources.

## 8. Learning Outcomes

Joint Health and Safety Committee (JHSC) certification training is an outcomes-based program, which means that certain knowledge and skills must be attained in order for a person to successfully complete the program. The following are the learning outcomes that must be achieved.

### 8.1. Part One Learning Outcomes

The following Learning Outcomes only may be delivered in an eLearning format for one (1) day or six and a half (6.5) hours of the Part One training:

- 8.1.1
- 8.1.2
- 8.1.5
- 8.1.6

Upon completion of Part One training, learners must be able to:

**8.1.1. Describe the certification process and explain the role of the certified member.**

a) Explain the certification process and provide an overview of the Part One, Part Two and Refresher training requirements.

**8.1.2. Describe the importance of occupational health and safety and outline the roles of each of the workplace parties.**

a) Explain why occupational health and safety is important for workers and employers. Describe the contribution of certification training to the goal of making Ontario workplaces as safe and healthy as possible.

b) Outline the roles and responsibilities of the different workplace parties in achieving effective health and safety programs, practices, and performance. Describe how this relates to the Internal Responsibility System (IRS).

**8.1.3. Identify occupational health and safety legislation, demonstrate how to access information from it, and explain the basic rights, responsibilities, and training requirements.**

a) Describe the structure of the Occupational Health and Safety Act (OHSA). Describe how to read laws, regulations, and standards, and practice finding information in the OHSA and regulations.

b) Outline how the regulations, standards, codes, guidelines, policies, and collective agreements support and supplement the OHSA.

c) Describe the following features of the OHSA and find relevant sections. Outline how these requirements are expressions of the IRS and how they work together:

i. The rights and responsibilities of employers, constructors, workers, supervisors, directors and officers of a corporation, owners, and suppliers;

ii. The worker's responsible exercise and management of the "right to know," "right to participate", and "right to refuse";

iii. An overview of the training requirements of the OHSA and its associated regulations;

iv. The employer's obligation to develop a health and safety policy and program, as well as a workplace violence and workplace harassment policies and programs.

d) Describe how supervisors, employers and workers may participate in Ministry of Labour inspections and investigations.

e) Describe methods of enforcement outlined in Part VIII of the OHSA (e.g., Ministry of Labour orders, stop work orders, etc.).

**8.1.4. Describe the purpose, legal requirements for, and rights, duties, and function of JHSCs and describe how a functioning JHSC works.**

a) Describe the purpose of the Joint Health and Safety Committee;

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

- b) Describe the legal requirements for establishing and maintaining a JHSC and find relevant provisions in the OHSA;
- c) Describe the rights, duties, and function of the JHSC and find references in the OHSA;
- d) Describe how JHSCs can develop and maintain effective communication, participation, teamwork, and problem-solving processes, and the merits of worker-manager co-operation in health and safety; and
- e) Demonstrate group process and problem-solving skills by applying effective listening, participation, and co-operation techniques to an occupational health and safety problem using a JHSC role play, case study or exercise.

### **8.1.5. Describe the rights, duties and responsibilities of JHSC members and certified members.**

- a) Describe the rights, duties, and responsibilities of JHSC members and certified members and find references in the OHSA;
- b) Describe the responsible exercise and management of the right to stop work; and
- c) Describe the circumstances in which a JHSC member or certified member interacts with the Ministry of Labour.

### **8.1.6. Describe the categories of hazards and the basic process of recognizing, assessing, and controlling hazards, and evaluating the hazard controls.**

- a) Explain the following terms:
  - i. Hazard;
  - ii. Occupational injury; and
  - iii. Occupational illness.
- b) Explain what is meant by “recognize, assess, and control hazards, and evaluate the hazard controls”.
- c) Describe the legislated roles and responsibilities of the workplace parties in recognizing, assessing, and controlling hazards, and evaluating the hazard controls.
- d) Describe the hazard categories and give examples for each:
  - i. Physical;
  - ii. Chemical;
  - iii. Biological;
  - iv. Musculoskeletal;
  - v. Psychosocial; and

vi. Safety.

e) Identify and give examples of the five factors that can contribute to a health and safety hazard (people, equipment, materials, environment and process).

f) Explain how a substance may exist as a gas, liquid, or solid, and how these states may be altered. Explain how they relate to the routes of entry to the body (inhalation, absorption, ingestion and injection).

g) Explain the body systems that could be affected, and how these effects may be acute, chronic, local, systemic, latent or interactive.

h) Introduce a Hazard Management Tool and describe how it is used.

**8.1.7. Explain hazard recognition and the process for workplace inspections and identify the legal requirements.**

a) Explain how hazard recognition is the initial identification of the potential for, or existence of, a hazard.

b) Identify the legal requirements for workplace inspections by JHSC members under the OHS Act and state the purpose of the inspection. In addition:

i. List the information and tools needed to prepare for a workplace inspection;

ii. Demonstrate how to conduct a workplace inspection and how to identify hazards during the inspection; and

iii. Describe how to prepare an inspection report for the JHSC and describe follow-up procedures.

c) Describe additional methods for identifying hazards such as:

i. Documenting worker concerns;

ii. Observation; and

iii. Review of documents such as workplace records and WSIB or Ministry of Labour reports.

**8.1.8. Explain the purpose of and describe basic methods for doing a hazard assessment.**

a) Explain how hazard assessment helps to determine how serious a hazard is.

b) Describe how to assess health and safety hazards using methods such as:

i. Inspections;

ii. Investigations;

iii. Job-hazard analysis;

iv. Observations;

- v. Interviews;
  - vi. Measurement against a workplace or recognized standard;
  - vii. Determination of compliance with regulations or legislation; and
  - viii. Comparison to other accepted standards and practices.
- c) State the purpose of exposure monitoring. In addition:
- i. Identify factors JHSC members should consider when present at the beginning of monitoring and when reviewing testing strategies and results;
  - ii. Identify regulations and standards for limits of exposure such as R.R.O 1990, Reg 833 Control of Exposure to Biological or Chemical Agents, O. Reg. 490/09 Designated Substances and the American Conference of Governmental Industrial Hygienists guidelines; and
  - iii. Define the terms: exposure values, threshold limit value (TLV), time weighted average limit (TWA), short term exposure limit (STEL), and ceiling exposure limit (C).

**8.1.9. Explain the purpose of, and describe basic methods of, hazard control.**

- a) Explain that hazard control is reducing or eliminating hazards.
- b) Describe how health and safety hazards may be controlled (at the source, along the path, and at the worker).
- c) Explain the qualities of an effective control.
- d) Describe five types of controls (elimination, substitution, engineering, administrative and personal protective equipment), explain the hierarchy of controls, and give examples of how they may be applied to health and safety hazards.

**8.1.10. Explain the purpose of the evaluation of hazard controls.**

- a) Explain the purpose of evaluating hazard controls.

**8.1.11. Practice hazard recognition, assessment, and control, and evaluation of the hazard controls.**

- a) Practice hazard recognition, assessment, and control, and evaluation of the hazard controls through an activity using a Hazard Management Tool.

**8.1.12. State the requirements for, and describe the processes for, reporting and investigating fatalities, critical injuries, work refusals, and complaints of dangerous circumstances.**

- a) State the legal requirements for reporting and investigating fatalities and critical injuries, work refusals, and complaints of dangerous circumstances.

- b) Describe the need for thorough investigations and an effective reporting system.
- c) Describe the roles and responsibilities of the Ministry of Labour, police, and workplace parties in an investigation.
- d) Describe responsibilities of the workplace parties at the scene of an injury.
- e) Using a case study, illustrate an effective investigation using:
  - i. Information gathering tools (e.g., effective note taking);
  - ii. Interviewing skills;
  - iii. Data analysis;
  - iv. Report writing; and
  - v. Follow-up recommendations and compliance schedules.

**13. Review and understand the legislative requirements for access to occupational health and safety information and demonstrate how to access typical sources of occupational health and safety information.**

- a) Describe the rights to information under the OHSA.
- b) List occupational health and safety resources and information available to the certified member, and discuss when experts should be consulted.
- c) Describe how to assess occupational health and safety information and how workplace parties can stay current with changes to legislation and regulations. and
- d) Identify sources of information on the occurrence of injury and disease (e.g., workplace records, Workplace Safety and Insurance Board reports). Describe how this information can be used to identify problems and evaluate programs.

**8.2. Part Two Learning Outcomes**

A Part Two program must include at least six hazards relevant to the committee member's workplace.

Upon completion of Part Two training, learners must be able to:

**8.2.1. Describe key concepts of Part One training including the process of how to recognize, assess and control hazards, and evaluate the hazard controls.**

- a) Review key concepts of Part One training including hazard recognition, assessment, and control methods, and evaluation of the hazard controls.
- b) Review the provincial hazard priorities and practice applying a hazard management tool to these priorities.

**8.2.2. Apply recognition, assessment, control, and evaluation principles to each of the workplace hazard(s) selected for the training program.**

- a) Describe the hazard and how it may cause injury or illness.
- b) Identify the relevant legislation, standards and guidelines for the hazard.
- c) Describe how to recognize and assess the hazard.
- d) Describe ways of controlling the hazard.
- e) Describe ways of evaluating the hazard control(s).
- f) Using an actual workplace scenario, practice completing a Hazard Management Tool.

**8.2.3. Create a draft action plan and recommendations for the employer on at least one hazard in Learning Outcome #2.**

- a) Using an actual workplace scenario, prepare an action plan to control at least one hazard.
- b) Using the action plan from 3a, prepare sample recommendations to the employer.

## **Appendix B- Survey Participant Consent Form**

You are invited to participate in a study entitled [**Evaluation of the Joint Health and Safety Committee Certification Training Program under the New Training Program Standard Introduced March 2016**] that is being conducted by Steven Grossman.

Steven Grossman is a graduate student in the department of Public Administration at the University of Victoria and you may contact Steven if you have further questions by phone at 416-460-8190 or email at [stevencgrossman@gmail.com](mailto:stevencgrossman@gmail.com).

As a graduate student, Steven is required to conduct research as part of the requirements for a degree in the Master of Public Administration Program. It is being conducted under the supervision of Dr. J. Barton (Bart) Cunningham. You can contact Dr. Cunningham by phone at (250)-598-9878 or by email at [bcunning@uvic.ca](mailto:bcunning@uvic.ca)

This study is also being conducted for Jules Arntz-Gray, Director of the Training and Awareness Branch at the Ontario Ministry of Labour's Prevention Division.

### **Purpose and Objectives**

The purpose of this research project is to evaluate the Ministry of Labour's changes to the Joint Health and Safety Committee (JHSC) Certification Training Program Standard that came into effect March 1, 2016. An evaluation will reveal whether the updated training program meets the objectives that the MOL set out to achieve when making changes to the program. Those objectives were to address inconsistent quality (i.e. design, content and delivery) of JHSC training across the province under the 1996 JHSC training program standard for JHSC Part 1 and Part 2 training; strengthen the health and safety culture throughout workplaces in Ontario; and improve workplace party compliance with legislative and regulatory requirements through improved JHSC training

### **Importance of this Research**

An evaluation is very important in order to ensure that the changes to the Joint Health and Safety Committee (JHSC) Certification Training Program are indeed strengthening the quality of training and thereby improving effectiveness of JHSCs in Ontario. JHSCs are essential in helping Ontario workplaces establish a strong health and safety culture and assist the Ministry of Labour in achieving a key portion of their mission, to provide protection against workplace injuries and illnesses and deaths.

### **Participants Selection**

You are being asked to participate in this study as an individual that has taken a JHSC Certification Training Course under the new JHSC Certification Training Program Standard that came into effect March 2016.

### **What is involved**

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

If you consent to voluntarily participate in this research, your participation will include an online survey. The survey will take approximately 25 minutes to complete.

### **Inconvenience**

Participation in this study may cause some inconvenience to you in the form of the time spend to take the survey.

### **Risks**

There are no known or anticipated risks to you by participating in this research.

### **Benefits**

The potential benefits of your participation in this research include helping the Ontario Ministry of Labour improve the JHSC Certification Training Program thereby positively impacting workplace health and safety in Ontario.

### **Compensation**

There will be no compensation for participating in this research project.

### **Voluntary Participation**

Your participation in this research is completely voluntary. If you do decide to take the survey, you may withdraw at any time without any consequences or any explanation. Please note that once the survey is submitted, it will be logistically impossible to remove responses.

### **Anonymity**

In terms of protecting your anonymity; the survey will be completely anonymous. It will not ask for any personal details.

### **Confidentiality**

Your confidentiality and the confidentiality of the data will be protected. During the course period of data collection, the survey data collected will be stored by the survey tool according to its terms of confidentiality as well as by the researcher in a private manner. Following the data collection period, data will be stored solely by the researcher in a private location.

### **Dissemination of Results**

It is anticipated that the results of this study will be shared with others in the following ways:

- Research report and/or power point presentation of the research findings will be presented to staff at the Ontario Ministry of Labour.

### **Disposal of Data**

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

Data gathered from the interviews will be kept indefinitely for the purposes of potentially using the research findings for future analysis by the researcher. The data will be stored on a password protected computer of the researcher.

### **Future Use of Data**

I consent to the use of my data in future research: \_\_\_\_\_ (Participant to provide initials)

I **do not** consent to the use of my data in future research: \_\_\_\_\_ (Participant to provide initials)

### **Contacts**

Individuals that may be contacted regarding this study include

Researcher: Steven Grossman, stevengrossman@gmail.com, 416 460 8190

Supervisor: Dr. J. Barton (Bart) Cunningham, bcunning@uvic.ca, 250 598 9878

In addition, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Human Research Ethics Office at the University of Victoria (250-472-4545 or ethics@uvic.ca).

By clicking on “agree” below, you are indicating that you understand the above conditions of participation in this study, that you have had the opportunity to have your questions answered by the researchers, and that you consent to participate in this research project.

**Appendix C- Survey Questions**

**General Questions**

**Please indicate if you took the JHSC training as a:**

- Worker Representative
- Employer Representative

**Please indicate if you work in a unionized work place**

- Yes
- No

**Who was your training provider?**

**Please indicate when you took the JHSC certification training program (under the new Ministry of Labour training standard)**

\_\_\_/\_\_\_/\_\_\_ (YYYY/MM/DD)

**Please indicate the sector you are employed in:**

**Please indicate your age range**

- 14-24
- 25-34
- 35-44
- 45-54
- 55+

**Please indicate which part(s) of the JHSC Certification Training Program you have completed:**

- Part One and Two
- Part One
- Part Two

**Design of the JHSC Certification Training Program**

**Please indicate your agreement with the statements below relating to the design of the JHSC Certification Training Program under the new standard**

**The JHSC Part One Training Course ...**

**Used an appropriate literacy level**

- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

**Used helpful teaching aids (e.g. audio-visuals, safety devices and measuring equipment).**

- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

**Included alot of interaction between the training participants and instructors (e.g. through activities such as case studies, role play, group work, assignments and discussion groups)**

- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

**Related learning to my own workplace experience**

- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

**Design of the JHSC Certification Training Program**

**The JHSC Part Two Training Course ...**

**Used an appropriate literacy level**

- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

**Used helpful teaching aids (e.g. audio-visuals, safety devices and measuring equipment).**

- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

**Included alot of interaction between the training participants and instructors (e.g. through activities such as case studies, role play, group work, assignments and discussion groups)**

- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

**Related learning to my own workplace experience**

- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

**Please indicate your agreement with the statements below relating to the design of the JHSC Certification Training Program under the new standard**

**If you could change one thing about the design of the training program what would it be? Why?**

**Do you have any other comments?**

**Learning Goals of the JHSC Training Program**

**JHSC Part One Training Course**

**Please indicate your agreement with the statements below relating to the learning goals following your completion of the JHSC Program (Part One) under the new standard:**

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
I understand the JHSC Certification Process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the role of a certified JHSC member	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can describe the roles of each of the workplace parties in promoting occupational health and safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can describe the basic rights, responsibilities, and training requirements of the occupational health safety act.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can describe the basic process for recognizing, assessing and controlling hazards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can describe the processes for reporting and/or investigating fatalities and/or critical injuries and/or work refusals and/or	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD**

complaints of dangerous circumstances.

**Please indicate how appropriate the learning goals were for JHSC Part One Training:**

- Very Appropriate
- Appropriate
- Neither Appropriate or Inappropriate
- Inappropriate
- Very Inappropriate

**Please provide any other comments:**

**Please indicate your agreement with the following statement:**

After completion of Part One Training, I acquired knowledge of overall health and safety

- Strongly Agree
- Agree
- Neither appropriate or inappropriate
- Disagree
- Strongly Disagree

**JHSC Part Two Training Course**

**Please indicate your agreement with the statements below relating to the learning goals following your completion of the JHSC Program (Part Two) under the new standard:**

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
I can apply the recognition, assessment, control, and evaluation (RACE) principles to workplace hazard(s).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can create a plan for an employer to address a workplace hazard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Please indicate how appropriate the learning goals were for JHSC Part Two Training:**

**RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD**

- Very Appropriate
- Appropriate
- Neither appropriate or inappropriate
- Inappropriate
- Very Inappropriate

**Please provide any other comments:**

**According to the new standard, the Part Two training program must include at least six hazards relevant to the committee member's workplace: Please indicate how many of the hazards were relevant to your workplace:**

- 0
- 1
- 2
- 3
- 4
- 5
- 6

**Please indicate your agreement with the following statement:**

After completion of Part Two Training, I acquired knowledge of health hazards adaptable to my workplace?

- Strongly Agree
- Agree
- Neither Agree or Disagree
- Disagree
- Strongly Disagree

**Delivery of the JHSC Training Program**

**Part One**

**Please indicate which delivery mode was used for the JHSC training programs you completed under the new standard?**

**RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD**

- Blended- combination of in person and e-learning
- Distance
- In Person

**How satisfied were you with the learning experience from this mode of delivery?**

- Very Satisfied
- Satisfied
- Neither Satisfied or Dissatisfied
- Dissatisfied
- Very Dissatisfied

**In your opinion, what were the benefits to using this mode of delivery?**

**In your opinion, what were the challenges to using this mode of delivery?**

**Would you recommend this mode of delivery for JHSC courses to others?**

- Yes
- No

**Other**

**Please indicate your level of agreement with the following statements:**

	Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly Disagree
I am using the knowledge gained in JHSC training courses in my workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am influencing the health and safety culture at my workplace using the knowledge gained in JHSC training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After completing JHSC training, I am in a better position to ensure my workplace is in compliance with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

occupational health and safety  
legislative and regulatory  
requirements

**Did you also take JHSC Certification Training, Part One, under the original 1996 standard?**

- Yes
- No

**If you can recall, when did you take the JHSC training (under the original 1996 standard)?**

\_\_\_/\_\_\_/\_\_\_ (YYYY/MM/DD)

**Please indicate your level of agreement with the following statements comparing the JHSC Training Programs under the original program standard versus under the new program standard:**

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
The design of the JHSC Training Program has improved	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The learning outcomes of the new JHSC Training Program are more appropriate for learners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The new JHSC training program is more applicable to my workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## **Appendix D- Interview Participant Consent Form**

You are invited to participate in a study entitled [**Evaluation of the Joint Health and Safety Committee Certification Training Program under the New Training Program Standard Introduced March 2016**] that is being conducted by Steven Grossman.

Steven Grossman is a graduate student in the department of Public Administration at the University of Victoria and you may contact Steven if you have further questions by phone at stevengrossman@gmail.com or 416-460-8190.

As a graduate student, Steven is required to conduct research as part of the requirements for a degree in the Master of Public Administration Program. It is being conducted under the supervision of Dr. J. Barton (Bart) Cunningham. You can contact Dr. Cunningham at (250)-598-9878

This study is also being conducted for Jules Arntz-Gray, Director of the Training and Awareness Branch at the Ontario Ministry of Labour's Prevention Division.

### **Purpose and Objectives**

The purpose of this research project is to evaluate the Ministry of Labour's changes to the Joint Health and Safety Committee (JHSC) Certification Training Program Standard that came into effect March 1, 2016. An evaluation will reveal whether the updated training program meets the objectives that the MOL set out to achieve when making changes to the program. Those objectives were to address inconsistent quality (i.e. design, content and delivery) of JHSC training across the province under the 1996 JHSC training program standard for JHSC Part 1 and Part 2 training; strengthen the health and safety culture throughout workplaces in Ontario; and improve workplace party compliance with legislative and regulatory requirements through improved JHSC training

### **Importance of this Research**

An evaluation is very important in order to ensure that the changes to the Joint Health and Safety Committee (JHSC) Certification Training Program are indeed strengthening the quality of training and thereby improving effectiveness of JHSCs in Ontario. JHSCs are essential in helping Ontario workplaces establish a strong health and safety culture and assist the Ministry of Labour in achieving a key portion of their mission, to provide protection against workplace injuries and illnesses and deaths.

### **Participants Selection**

You are being asked to participate in this interview because of your professional experience as an instructor of the JHSC Certification Training courses.

### **What is involved**

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

If you consent to voluntarily participate in this research, your participation will include an in-person or telephone interview. The survey will take approximately between 30 minutes to 1 hour complete. Written notes will be taken during the course of the interview.

### **Inconvenience**

Participation in this study may cause some inconvenience to you in the form of the time spend to take the survey.

### **Risks**

There are no known or anticipated risks to you by participating in this research.

### **Benefits**

The potential benefits of your participation in this research include helping the Ontario Ministry of Labour improve the JHSC Certification Training Program thereby positively impacting workplace health and safety in Ontario.

### **Compensation**

There will be no compensation for participating in this research project.

### **Voluntary Participation**

Your participation in this research is completely voluntary. If you do decide to participate, you may withdraw at any time without any consequence or any explanation by informing the researcher. If you do withdraw from the study your data will be destroyed and not included in the analysis.

### **Anonymity**

In terms of protecting your anonymity, references to individual's names that participated in the interviews will not be made in the research project.

### **Confidentiality**

Your confidentiality and the confidentiality of the data will be protected. The data collected from the interviews will be stored privately by the researcher. Please note that there may be limits to confidentiality based on the recruitment of interview participants.

### **Dissemination of Results**

It is anticipated that the results of this study will be shared with others in the following ways:

- Research report and/or power point presentation of the research findings will be presented to staff at the Ontario Ministry of Labour.

### **Disposal of Data**

Data gathered from the interviews will be kept for five years after which it will be destroyed. The data will be stored on a password protected computer of the researcher.

**Future Use of Data**

I consent to the use of my data in future research: \_\_\_\_\_ (Participant to provide initials)

I **do not** consent to the use of my data in future research: \_\_\_\_\_ (Participant to provide initials)

**Contacts**

Individuals that may be contacted regarding this study include

Researcher: Steven Grossman, (416) 460 8190

Supervisor: Dr. J. Barton (Bart) Cunningham, (250) 721-8849

In addition, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Human Research Ethics Office at the University of Victoria (250-472-4545 or ethics@uvic.ca).

Your signature below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researcher.

\_\_\_\_\_

Name of Participant	Signature	Date
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## **Appendix E- Interview Questions**

### **General**

1. How long have you been a JHSC Training Program Instructor?
2. Which JHSC Training Program do you teach (i.e. Part One, Two)?

### **Design of the JHSC Training Program**

3. Can you describe an element of the new JHSC training program's design that you have observed or experienced which really worked well?
4. Can you describe an element of the new JHSC training program's design that you have observed or experienced which does not work very well?
5. (if applicable) Do you have any recommendations for addressing these issues?

### **Learning Objectives of the JHSC Training Program**

6. Do you feel the learning outcomes of Part One JHSC training are appropriate for learners? If not, why?
7. Do you feel the learning outcomes for JHSC Part One training set out by the new training standard are being met? If not, why?
8. Do you feel the learning outcomes for JHSC Part Two JHSC training are appropriate for learners? If not, why?
9. Do you feel the learning outcomes for JHSC Part Two training set out by the new training standard are being met? If not, why?
10. (if applicable) Are employers choosing hazards that are relevant to their workplaces for the JHSC Part Two training program?

### **Delivery of the JHSC Training Program**

11. Which methods do you use?

Based on this ask:

If they do blended learning:

12. Have you observed or experienced any benefits to learners from the new delivery model options (e.g. e-learning) for the JHSC Training Program?
13. Have you observed or experienced any challenges with the new delivery model options for the JHSC training program? Or ask do you see any disadvantages for people who use the new methods?
14. (if applicable) Do these challenges impact all learners equally?

## RUNNING HEAD: EVALUATION OF THE JHSC TRAINING PROGRAM STANDARD

15. (if applicable) Do you have any recommendations for addressing these issues?
16. Do you feel that JHSC training program participants are receiving equal quality of training regardless of the mode of delivery?

### **Other:**

17. Following completion of the JHSC Training Program, do you feel that training program participants are properly positioned to apply the knowledge gained in JHSC training courses in their workplace?
18. Have you experienced the JHSC Training Program under the original (1996) program standard?
19. Have you observed an improvement in the overall quality of the JHSC training programs under the new standard versus the original (1996) standard? If not, why?
20. (if applicable) What has been the greatest improvement?
21. Do you feel there is anything that still needs to be improved under the new program standard?
22. Would you recommend the JHSC Training Program under the new standard be re-taken by those who have already taken the JHSC training under the original standard?

**Appendix F- Email to Training Providers**

Hello,

Attached, you will find information regarding a research project being conducted by a Master of Public Administration student, Steven Grossman, for the purposes of his academic program requirements. Steven's research project will be evaluating the Joint Health and Safety Committee (JHSC) Certification Training Program Standard introduced by the Ministry of Labour in March 2016.

For this project, Steven will be conducting online surveys (approximately 15 to 20 minutes to complete) with individuals who have completed a JHSC Certification Training course under the new JHSC program standard; as well as interviews (for approximately 30 minutes) with JHSC Certification Training Program instructors from approved Ministry of Labour training providers to capture their opinions of the new JHSC Certification Training Program given their professional experience with the program.

Participation is voluntary, but I encourage participation where possible as it is important to continually work to improve the training provided to Ontario workers. I kindly ask that you consider distributing the link to the survey(<http://uvic.fluidsurveys.com/surveys/42-3e45318fc34ede42bf2ac5ede40/copy-joint-health-and-safety-committee-training/>) to your training participants. Please reply back and confirm by July 31, 2017 if you are able to help distribute this survey to your training participants. The survey will be open until August 31, 2017.

As well, if you are willing to participate in an interview or can refer a JHSC program instructor that would like to participate, please contact Steven Grossman at [stevencgrossman@gmail.com](mailto:stevencgrossman@gmail.com) and every effort will be made to schedule a convenient interview time. Steven is aiming to complete interviews by August 31, 2017.

This research is extremely important to ensure the effectiveness of the new JHSC Certification Training and continually improve health and safety training in the province.

If you have any questions about the research, please feel free to contact Steven.

Thank you for your consideration.

Best Regards,

Jules Arntz Gray  
Director, Training and Awareness Branch  
Ministry of Labour, Prevention Division

## **Appendix G- Backgrounder Included in Email to Training Providers**

Hello,

As part of my completion of the Master of Public Administration program at the University of Victoria I am conducting a research project evaluating the Joint Health and Safety Committee (JHSC) Certification Training Program Standard introduced by the Ministry of Labour in March 2016.

For this project, I will be conducting online surveys (approximately 15 to 20 minutes to complete) with individuals who have completed a JHSC Certification Training course under the new JHSC program standard; as well as interviews (for approximately 30 minutes) with JHSC Certification Training Program instructors from approved Ministry of Labour training providers to capture their opinions of the new JHSC Certification Training Program given their professional experience with the program.

Your participation in this research can have a profound impact on workplace health and safety in Ontario. JHSCs are essential in helping Ontario workplaces establish a strong health and safety culture and assist the Ministry of Labour in achieving a key portion of their mission, to improve worker health and safety. It is therefore important to ensure the ongoing effectiveness of the Ministry's JHSC Certification Training Program.

Please note that participation is entirely voluntary, and can be withdrawn at any time without reason or explanation by contacting the researcher.

Any and all information collected during the course of the survey will be kept confidential.

For individuals who have completed a JHSC Certification Training course under the new JHSC program standard and would like to participate in this survey, please [click here](#). The first page in the online survey will be the participant consent form for this project.

For JHSC Certification Training Program instructors that would like to participate in interviews please contact [stevengrossman@gmail.com](mailto:stevengrossman@gmail.com). A consent form will be emailed prior to the interview taking place.

I am excited to begin this project and look forward to your participation.

Best regards,

Steven Grossman MPA Candidate,  
University of Victoria  
[stevengrossman@gmail.com](mailto:stevengrossman@gmail.com)