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Exploring Hybrid Learning: Enhancing Access to Health and Safety Education at WorkSafeHealth

Tiana M. Larocque
tlarocq4@uwo.ca

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Abstract

WorkSafeHealth, a not-for-profit health and safety association in the province of Ontario, is mandated by the Ministry of Labour, Immigration, Training and Skills Development to provide training and consultation services to client firm trainees across the province. Despite the efforts of WorkSafeHealth personnel to provide timely access to health and safety education, the vast regional expanse in which WorkSafeHealth provides these services hinders consultant-trainers' abilities to furnish training to Ontario workers who must be equipped with this critical information to work safely in their respective industries. Therefore, current operational service delivery methods must change to support WorkSafeHealth personnel's fulfillment of the organization's mandate. Currently, learners residing in remote areas are often required to travel hundreds of kilometres to reach a training venue when a required course is offered: these commutes are often undertaken on rough terrain and other roads with hazards that could result in motor vehicle incidents. WorkSafeHealth can capitalize on the organization's existing learning technologies to facilitate courses simultaneously to face-to-face and virtual learners: a training model known as hybrid learning. After illuminating WorkSafeHealth's organizational context, mandate, and organizational influences, throughout this organizational improvement plan, effective approaches to leadership through which this solution can be implemented, communicated, and monitored and evaluated is presented.

Keywords: health and safety training, Ontario health and safety association, participative leadership, democratic leadership, Delphi technique, hybrid learning

Executive Summary

Since its inception in 2010, WorkSafeHealth has relied on face-to-face course delivery to provide client trainees with the critical health and safety knowledge they need to work at reduced risk of occupational injury. Though there was a temporary transition to fully virtual training in 2020 and 2021 because of COVID-19 pandemic restrictions and other public health measures, consultant-trainers have since returned to more traditional operations to satiate the client palate for synchronous, or real-time, facilitation of these courses. Even before the temporary pause of face-to-face training service delivery, WorkSafeHealth personnel acknowledged difficulty with providing access to mandatory training sessions in a timely manner for a learner base that spans the province. As members of a health and safety association responsible for the provision of training and consultation services to client firms across a significant portion of Ontario, WorkSafeHealth personnel have identified the need to shift from traditional face-to-face approaches in efforts to support trainees in their acquisitions of mandatory training. Thus, the problem of practice in this organizational improvement plan illuminates the barriers toward trainee access to timely health and safety education, and questions whether alternative approaches toward training service delivery can be explored to enhance client access.

In Chapter 1, an organizational context is provided, which elaborates on the scope of health and safety associations in the province and their accountabilities to the Ministry of Labour, Immigration, Training and Skills Development. Further information is provided on WorkSafeHealth's organizational structure and corporate culture, which are heavily influenced by characteristics of structural functional and interpretivist (Capper, 2019) systems. The participative and democratic approaches to leadership epitomized by those on WorkSafeHealth's leadership team are also described and serve to further highlight how an interpretivist culture is

fostered in the organization. After describing and framing the problem of practice—enhancing timely, equitable access to health and safety education—additional information depicting the limitations of current training service delivery methods informs readers on why change is necessary.

Chapter 2 contains insights into the author's personal approaches to change leadership, which also integrate participative and democratic approaches, and provides further context illuminating WorkSafeHealth's recognition that shifting operations is necessary to support client trainees. The Delphi technique, a consensus-based approach toward acquiring stakeholder feedback in organizational decision making (Beech, 1999; Cone & Unni, 2020; Dalkey & Heimer, 1963; Loo, 2000; Ogbeifun et al., 2017), is described and proposed as a means through which change initiatives can be examined in a participative-democratic environment. In the latter part of Chapter 2, a series of three solutions is discussed, and the focus on benefits of pursuing hybrid learning opportunities to mitigate the problem of practice is made apparent.

In Chapter 3, a change implementation plan applying the principles of the plan, do, check act (Manuele, 2014; Williams, 2020) model is proposed: this four-phase approach is also utilized in the development of an accompanying monitoring and evaluation plan supporting a transition to hybrid learning toward the end of the chapter. A communication plan highlighting how verbal, written, and digital correspondence can be applied in employing the Delphi technique and maintaining discourse with other organizational personnel is described. The conclusion of this chapter furnishes information on next steps and future considerations, and an epilogue provides details on the current status of this change project.

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Acronyms

CATS	Changing as three steps
HSA	Health and safety association
MLITSD	Ministry of Labour, Immigration, Training and Skills Development
PDCA	Plan, do, check, act
PESTLE	Political, economic, sociocultural, technological, legal, environmental
WSIB	Workplace Safety and Insurance Board

Chapter 1: Problem Posing

With formal training, professional experience, and a personal passion for adult education, as well as a desire to contribute to effective occupational health and safety practices in workplaces across Ontario, I am grateful for the opportunity to be employed by WorkSafeHealth: a health and safety association (HSA) that delivers training and consultation services to client firms across the province. My additional passion for and experience in change management initiatives has also propelled me toward exploring how WorkSafeHealth can better convey critical health and safety information to workers across Ontario. As someone who was asked to design a change plan to support this goal in a leadership capacity, I have reflected on how my approaches and perspectives on leadership could influence the outcome of this initiative. After describing my agency, position, and leadership approach, I discuss WorkSafeHealth's influences and dynamics, illuminating how my approaches to leadership align with the organization's culture. After situating myself in WorkSafeHealth's context, I express my problem of practice, and I further frame the problem by outlining reasons for pursuing alternatives to enhance access to training services. After listing key guiding questions stemming from my problem of practice, I conclude this chapter by summarizing my leadership-focused vision for change.

Positionality and Lens Statement

In this section, I discuss the role, position, and agency I have as an employee of WorkSafeHealth. I then illuminate my personal perspectives on and approaches to leadership, elaborating on the techniques I apply when assuming a leadership role.

Agency and Positionality

As an instructional designer and course facilitator, I have been able to apply my training and experience in adult education to a career in health and safety. Despite transitioning to a

bargaining unit position from a prior leadership role in a higher education institution, I have assumed the lead in various change initiatives for WorkSafeHealth. Projects include the standardization of processes for accumulating industry stakeholder insights into pertinent occupational hazards and the formulation of procedures for WorkSafeHealth webinar events. Other team leader positions through which I have supported the organization are shared later in this chapter. In addition, I serve as co-chair on two committees (while being an active member on another).

Though the development and update of training programs and facilitation of courses comprise the primary tasks assigned to me in my position, I appreciate opportunities for involvement in change management projects that reside beyond the scope of WorkSafeHealth's Department of Health and Safety and Training Services. While I am not a formal leader in WorkSafeHealth's organizational structure, my work on various projects as a team leader has been acknowledged and appreciated by my counterparts as well as members of the leadership team. Next, I discuss how my approaches to leadership influence my personal practice.

Personal Approaches to Leadership

Before my employment at WorkSafeHealth, as a director at a private career college in Northern Ontario, I accumulated experience enabling me to enhance my personal leadership practice. I found that participative leadership, characterized by the accumulation and integration of stakeholder feedback in organizational decision making (Howell & Wanasika, 2018; Northouse, 2016), best resonated with my beliefs on encouraging stakeholder voices, achieving consensus, and procuring optimal solutions to address a problem. As an educator, I have witnessed how group collaboration supports the generation of robust perspectives and contributes to performance enhancement: an approach resonating strongly with collective goal

achievement fostered by a participative leadership style. In my role as director, I adopted a different approach to accumulating feedback on the review of college diploma programs than that of my predecessor. To collect more insights during program reviews traditionally conducted by college faculty, I invited external industry stakeholders to formulate program advisory committees. In collaborating with this group, the college's program development department was able to integrate valuable, contemporary insights on industry realities into college programming, providing added value for students aspiring to begin careers in those domains. More importantly, industry partners appreciated the opportunity to provide feedback, enhancing their relationship with the college. I elaborate on the relationship between stakeholder contributions and satisfaction in Chapter 2 when discussing participative leadership in change management.

I have also found a participative leadership approach to be valuable as a project leader at WorkSafeHealth. In 2021, when asked to standardize program development department processes and protocols, I recognized that my own design of these documents would be largely insufficient in capturing all facets of what was required. In forming a task force of internal personnel, I gleaned insights across the program development and adjacent departments, accumulating historical perspectives and insights into how processes could better harmonize and address needs across the organization. Together, we formulated a protocol series that is perceived as valuable to program development teammates and those in other departments.

There is truth in the expression, 'strength in numbers': participative leadership approaches provide opportunities for the collaboration necessary to maximize project outcomes. Like Coffeng et al. (2021), I believe that stakeholder commitment and trust are enhanced when a participative leadership style is employed: a culture of transparency in conjunction with strong relationships stimulates critical reflection from team members that, in turn, generates

better solutions through collaborative work. I also recognize the value of stakeholder autonomy in formulating decisions with personal impact (Northouse, 2016), particularly as I collaborate with teams that already expect a high level of self-regulation of their own work. I explain the ways through which personnel are required to operate autonomously in the section dedicated to WorkSafeHealth's organizational context.

Northouse (2016) found significant parallels between participative and democratic leadership, referred to simultaneously throughout the author's work. Because democratic leadership is also characterized by the accumulation of team member feedback that is factored into decision making (Jasper, 2018) with a leader's dual intention to create trusting, positive group relationships (Goleman et al., 2013), I also perceive strong similarities between these two approaches. However, I disagree with Northouse's (2016) claim that task formulation under participative and democratic approaches remains ambiguous and unstructured. Through clear establishment of a project scope and committing to timelines toward its completion, I believe that the application of formal expectations contributes to success with a structured approach to a change initiative. This is something I actively collaborate with others to establish at the conception of a stakeholder group by formulating a terms of reference document and a project scope. When considering democratic leadership, I do agree with Jasper's (2018) recommendation that this approach be utilized in instances where less immediate change is required, providing a group with sufficient time to reflect on perspectives before providing feedback. However, I acknowledge that when I am faced with a situation requiring a more immediate need for change, I lean on pacesetter leadership (Jasper, 2018) where timely targets are made more explicit. I prefer this approach in situations where change is imminent when comparing it to coercive (Barling, 2014) or commanding leadership (Goleman et al., 2013) that

diminishes the influence of stakeholder voices with a focus on automatic reward or discipline based on employee efforts. In pacesetting leadership, a leader inspires others to work diligently toward a time-sensitive organizational goal (Jasper, 2018). Because I believe that leadership approaches are contingent on context, to some extent, I also identify with an adaptive leadership approach by focusing on organizational problems and supporting a team toward addressing them, rather than employing a leader-centric approach to addressing issues (Northouse, 2016). As a facilitator instead of a figurative spearhead during change initiatives, I focus on motivating others to work toward change goals in efforts to “encourage others to address and resolve changes that are central to their lives” (Northouse, 2016, p. 258). This contributes to work satisfaction and productivity (Miller & Monge, 1986; Northouse, 2016) and the needs for autonomy and control in those involved in a participative leadership dynamic (Northouse, 2016) that I also believe are integral components of personal human nature. My problem of practice delves into a key area that, should change occur, will affect the operations of a significant number of WorkSafeHealth personnel. Though the adaptive style resonates with my approach, I identify most strongly with participative and democratic leadership techniques.

In line with equity and inclusion, the themes of collaboration, voicing perspectives, building relationships, and achieving consensus in decision making—especially for those affected by organizational change—contribute to my personal perspectives on effective leadership. I will situate my intended application of these themes throughout this organizational change plan. I am grateful to work for an organization that actively fosters a collaborative dynamic among its employees. Next, I outline how this is emanated in WorkSafeHealth’s corporate culture after situating the organization in Ontario’s health and safety network, known as the Prevention System.

Organizational Context

WorkSafeHealth is one of six provincial not-for-profit HSAs that strives for the elimination of occupational injuries and illnesses in Ontario workplaces by providing training and consultation, among other services, to client firms. In an endeavour to reduce the number of occupational incidents that affect Ontario workers each year—resulting in the 240 fatalities and 69,503 lost-time injury claims reported by the Workplace Safety and Insurance Board (WSIB) in 2022 (WSIB, 2023; WSIB, 2023b)—WorkSafeHealth facilitates training sessions to equip the province’s workforce with critical understanding of industry-specific occupational hazards with which they work. As one of four sector-specific HSAs, WorkSafeHealth focuses on providing its services to firms operating in specific industries; however, given its location, this association is also responsible for providing general multi-sector services to a large geographic base throughout the province. Educational sessions offered by the association include training for working safely at heights and safe operation of heavy mobile equipment. Given that working at heights is “one of the most dangerous tasks that workers can be asked to perform” (Occupational Safety Group, 2023) and that hazards associated with mobile equipment are among the most common in the mining industry (Workplace Safety North, 2023) and in industrial workplaces (Ministry of Labour, Immigration, Training and Skills Development, 2021), WorkSafeHealth is responsible for furnishing training designed to enhance worker safety around these hazards. To further illustrate WorkSafeHealth’s organizational context, I enumerate the political, economic, and social influences that contribute to the organization’s structure and dynamics. I also highlight how WorkSafeHealth’s organizational culture reflects the collective commitment to support its zero-injury and zero-illness vision.

Political, Economic, and Social Influences

Like the other HSAs, WorkSafeHealth receives its mandate from the Chief Prevention Office under the province's Ministry of Labour, Immigration, Training and Skills Development (MLITSD). Though WorkSafeHealth operations are overseen by this office, the organization receives its funding through annual transfer payment agreements, awarded by the MLITSD, from Ontario's WSIB, the province's occupational injury and illness compensatory body. The Prevention System, Ontario's health and safety network with a mandate to prevent occupational injuries and illnesses in the province, is comprised of HSAs, the MLITSD, and the WSIB. This group of agencies has shifted substantially, with organizations involved in health and safety governance and oversight having undergone significant changes and continued restructuring since the network's inception in the earlier twentieth century. In Appendix A, I highlight how WorkSafeHealth—and other associations—is the product of a series of legacy HSAs that have served specific industry sector firms since 1915, demonstrating the degree to which this network has shifted: a trait even acknowledged by the MLITSD as being “complex” (2018).

In recent years, reviews of Prevention System operations have generated a series of recommendations from provincial regulatory bodies and system overseers. Like its current counterparts, WorkSafeHealth assumed operations in 2010 with an amalgamation of three legacy sector-specific associations. While the 2010 shift enabled the HSA to offer more specialized services, such as ergonomic assessments, to other industries served by prior HSAs that did not offer this resource, all personnel were required to undergo an interview process to obtain employment at WorkSafeHealth; only half of the prior labour force was retained. In addition, WorkSafeHealth had undergone a merger as well as disbandment into separate associations twice in the prior two decades. All of these shifts were based on consultations and recommendations

from Prevention System partners, including the then-Ministry of Labour and the WSIB. While there is no current discourse on restructuring, history does indicate potential for future shifts.

More recently, in 2019, a province-wide industry taxonomy that classified businesses by work performed, known as a rate group, shifted to the North American Industry Classification System, consolidating 339 rate groups into 34 classifications (WSIB, 2022). This consolidation resulted in HSAs assuming service delivery responsibility for some industry sectors that were not initially under their purview. WorkSafeHealth continues to develop dedicated offerings to support newly assigned industries; in turn, the regional expanse in which WorkSafeHealth offers services has also expanded. Furthermore, in 2019, additional reporting requirements to the MLITSD on the impact of HSA services have become mandatory. In the Office of the Auditor General of Ontario's (2019) report, impact measurement should include "changes in the rates of injuries and fatalities in businesses that received [HSA] consulting and training services" (p. 397). WorkSafeHealth is still adjusting to these reporting requirements and has diversified operations in efforts to accentuate its role in influencing workplace health and safety by developing a series of auditing tools and other measures to further demonstrate its worth as a leading organization in occupational injury and illness reduction.

I anticipate that the Prevention System, which has remained in a relative state of flux since its creation, will continue to undergo changes in the coming years, though it will never become redundant. Despite efforts from system counterparts, incidents continue to occur, resulting in nearly \$6.3 billion in compensatory claim payouts for 527,911 injuries (WSIB, 2023b) and 2,890 fatalities (WSIB, 2023) between 2012 and 2022. However, the work conducted by Prevention System agencies has likely contributed to considerable decreases in injury claims. Between 2001 and 2011, Ontario workers sustained 891,265 injury events requiring

compensation for lost time (Association of Workers' Compensation Boards of Canada, 2021): a reduction of 363,354 in the following 10 years. Similarly, there were 4,149 fatalities between 2001 and 2011 (Association of Workers' Compensation Boards of Canada, 2021): a reduction of 1,259 events when compared to numbers between 2012 and 2022. The need for HSAs to continue offering health and safety education, among other services, remains apparent. Despite concerns regarding potential restructuring from WorkSafeHealth employees—particularly those who witnessed layoffs in the 2010 amalgamation—personnel remain driven to contribute to the organization's mandate. Next, I discuss how a shared passion for occupational injury and illness reduction is a key tenet in WorkSafeHealth's corporate culture, and I situate my perspectives on leadership within this culture to demonstrate their alignment.

WorkSafeHealth's Organizational Culture

WorkSafeHealth personnel are keenly dedicated to the work they do to support occupational health and safety. According to Great Place to Work survey results from 2018, 85 percent of respondents indicated a strong belief in the organization's mission, with most respondents stating that fulfillment of this mandate was the primary motivator for employment with the organization. This survey information was disseminated to WorkSafeHealth personnel during an internal all-staff meeting in 2019 and has since been a source of pride for the organization.

WorkSafeHealth has a structural functional (Capper, 2019) organizational structure with hierarchical reporting mechanisms throughout three distinct departments. Executive leadership is comprised of a chief executive officer (who reports to a board of directors) with three vice presidents and two directors as direct reports. Three other directors, two managers, and one supervisor report to their respective vice presidents and oversee 55 unionized personnel and three

non-unionized support staff. In Appendix B, I include a visual depiction of WorkSafeHealth's organizational hierarchy for further context. Though the structure depicts a top-down approach to organizational dynamics, WorkSafeHealth employees, whom I have previously referred to as stakeholders, are regarded precisely as such, being organizational members who have an "interest in ensuring the success of an organization" (Oxford English Dictionary, 2022) and are provided with the opportunity to openly divulge questions, concerns, and general perspectives on operations. This resonates with Capper's (2019) summary of an interpretivist organizational structure, where stakeholder feedback is sought, and employee thoughts and feelings are factored into decision making. WorkSafeHealth personnel have been consistently involved with change initiatives, including the development of new policies, as well as the redevelopment of the association's corporate values: an exercise that took place in 2018. This involvement attests to how employees are actively involved in operational decision making. Furthermore, as a former vice president on the union's local executive board, I can attest to the positive relationship between the local and WorkSafeHealth's management, where constructive dialogue—in the place of adversarial discourse—prevails between the local executive and the leadership team.

WorkSafeHealth's consultant-trainers are based out of home offices dispersed across the province. Given the large regional expanse in which consultant-trainers provide services to client firms, long commutes on highways as well as forest roads and other unmaintained, rough terrain throughout the province are not uncommon. When considering these working conditions, it is not surprising that vehicle and driving hazards, with associated concerns such as fatigue, poor weather conditions, and encounters with wildlife, comprise the top occupational hazard category for WorkSafeHealth employees. Previously, I alluded to how personnel are required to exercise high autonomy in scheduling their own work. While consultant-trainers are supported by the

organization's customer service department when arranging training sessions, they are still ultimately responsible for making these arrangements with their clients. Given the autonomy and expectations that consultant-trainers rightfully have in making decisions pertaining to their work, when considering my proposed change initiative, I firmly believe that a participative approach to guiding the change process is appropriate. This leadership style aligns with expectations in the association's corporate culture that this autonomy be perpetuated. I shift to a discussion about the area in which I believe change should take place next.

Leadership Problem of Practice

In this section, I describe an organizational issue that I intend to examine as a leadership problem of practice. After framing the problem and identifying reasons to explore change, I conclude by highlighting three questions that guide my work toward pursuing an effective solution.

The Problem: Equal Access to WorkSafeHealth Training Sessions

Since WorkSafeHealth's inception in 2010, offering health and safety training programs in a real-time, face-to-face format has been the standard mode of course delivery. In 2020, because of COVID-19 pandemic restrictions, WorkSafeHealth provided virtual training options to ensure that Ontario's workers in essential service industries were still able to receive legislated training so that client operations would not be interrupted. Though these were well-received when restrictions were in place, client demand for courses providing real-time interaction with instructors has resumed. With the easing of public health measures to counter potential exposure to COVID-19, WorkSafeHealth personnel have returned to regular operations and are offering these courses in traditional classroom settings.

I expressed how WorkSafeHealth personnel are often required to engage in long commutes to facilitate sessions outside of their immediate geographic regions. Similarly, clients also send their own personnel to other areas for health and safety training. Timely access to course offerings in areas that are mutually favourable for consultant-trainers and client firms continues to be problematic, resulting in delays with providing mandatory health and safety courses to client employees. Though WorkSafeHealth's traditional business operations have resumed, there is an ongoing need to ensure that timely, effective training is provided to employees in client firms across Ontario. My problem of practice addresses the following question: how can the lack of equitable access to health and safety education be addressed, thereby enabling WorkSafeHealth personnel to fulfill the organization's mandate?

Competing demands are faced by consultant-trainers who provide a wide array of services to client firms across Ontario. I provide further insight into this barrier, and others, next, as I reinforce the need to address this problem of practice.

Framing the Problem of Practice

After providing additional context into WorkSafeHealth's current model for delivering training services, I utilize the PESTLE framework (Cordell & Thompson, 2019; Hopkin, 2013; Warner, 2010) to further elaborate on my problem of practice and emphasize the need for organizational change.

WorkSafeHealth and Current Training Service Delivery

WorkSafeHealth personnel duly acknowledge their personal inability to furnish timely training, given the limited time they have due to schedules replete with conflicting obligations to their clients. I can attest to the recognized need that these trainers have posited in reformulating WorkSafeHealth's approach toward training options. In biannual planning meetings that took

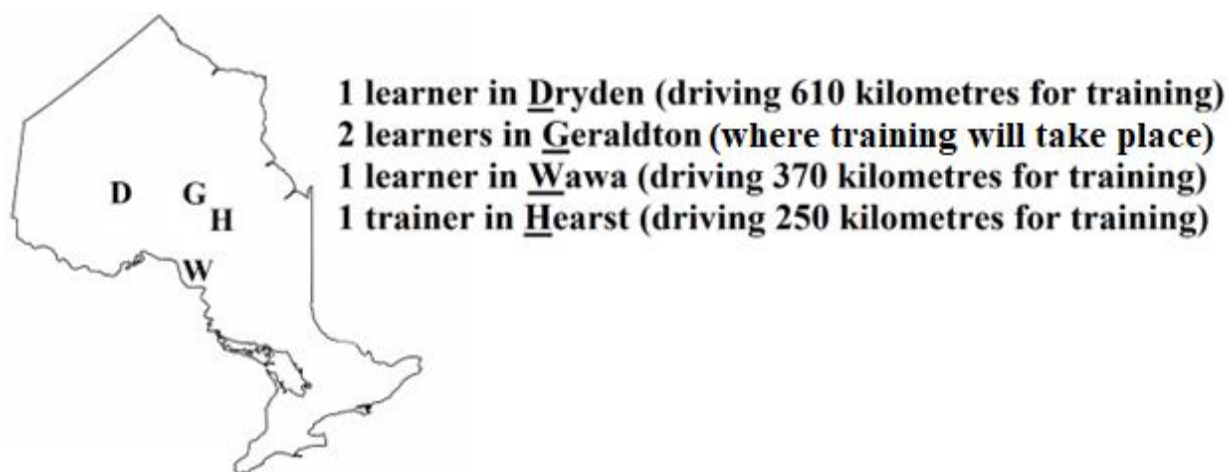
place prior to 2020 involving all WorkSafeHealth personnel, a common theme that surfaced for discussion was the examination of different means through which courses could be provided to ensure timely access to the association's clients. This has been a recurring topic that I have encountered throughout my six-year tenure with the organization. The repeated discussions, however, had generated little focus on proposed change plans to address the work realities of these consultant-trainers. Though there was a temporary hiatus from providing courses in the traditional format during COVID-19 pandemic lockdowns, the return to regular operations has fuelled the need to review WorkSafeHealth practices and determine whether there are other means through which client training needs can be fulfilled. In an all-staff meeting that took place in September 2022, discussion revolving around limited personnel to provide consistent, timely training to client firms across the province was addressed. There was acknowledgement from consultant-trainers and leaders alike that other options for training service delivery should be explored for the sake of personnel work-life balance as well as to ensure WorkSafeHealth employee health and safety remains a priority.

With the majority of WorkSafeHealth employees being based out of home offices, work requirements prescribe the need for these individuals to travel to client firm operations in other districts across Ontario. Given the geographic expanse for which WorkSafeHealth personnel are responsible, it is common for one consultant-trainer to travel hundreds of kilometres to facilitate a course or complete consulting work, contributing to the primary occupational hazard for this set of personnel. The reclassification of industry rate groups to which I alluded earlier has also increased demand in additional regions, resulting in even more travel requirements for these trainers.

I have already highlighted the additional need for client employers to often send their own workers to venues where consultant-trainers arrange course offerings for employees from different firms in the same industry sector. I provide a visual example of this type of arrangement in Figure 1.

Figure 1

Trainer and Learner Travel Requirements for Health and Safety Courses



Note. It is common for participants and trainers to travel hundreds of kilometres to take part in a course. In this example, Geraldton is identified as the mid-point; the trainer and a small group of trainees must undertake the commutes reflected in the figure. The values depict kilometres solely for one-way travel.

Upon successful completion of these courses, learners gain certifications required to fulfill their duties at work. This comes with significant cost: in addition to training fees, employers are also required to compensate workers for travel time to these areas while paying for accommodations and other living expenses. Both WorkSafeHealth and client firms face high costs to send their employees to these sessions; aside from salaries, travel and accommodations costs account for some of the highest expenses incurred by WorkSafeHealth. Conversely, course

participants also face hazards associated with travelling to remote areas when they must participate in a training session at a venue that is hundreds of kilometres away from where they live and work.

Though WorkSafeHealth rapidly transitioned to offering a variety of virtual training options during the COVID-19 pandemic, the return to face-to-face operations has resulted in infrequent reliance on computer-based training programs. In reviewing internal data, I found that asynchronous, or self-paced, virtual programming resulted in lower course completion rates. The absence of opportunities for real-time interaction is a likely contributor. Other authors have expressed similar limitations associated with asynchronous programming. O'Shea et al. (2015) and Tobin & Hieker (2021) associated diminished success and motivation in self-paced courses with feelings of isolation in these environments. In a two-cohort study—one cohort taking a course synchronously, and the other asynchronously—Van Nieuwenhuyse (2020) also found that students in a synchronous environment reported higher motivation levels than asynchronous learners. Several authors also concluded that a lack of motivation from limited collaboration opportunities in virtual environments affects learners' decisions to remain enrolled (Carver & Kosloski, 2015; Dymont & Downing, 2018; Hughes, 2010; Park, 2011; Walker & Creanor, 2009). Upon reflection, I understand why WorkSafeHealth's asynchronous programming produces lower completion rates and diminished satisfaction when compared to face-to-face courses. It is unsurprising, therefore, that client demand for real-time training post-pandemic, given the opportunity to resume this delivery method, has increased in intensity.

However, WorkSafeHealth's program development department and facilitation team were able to gain insights into the benefits of virtual learning opportunities. Virtual options can address the needs of those who cannot attend a face-to-face course because of personal illness or

due to public health restrictions. In comparison to asynchronous methods, one key observation noted by WorkSafeHealth personnel is that synchronous virtual education generates better learning experiences for trainees. Guo (2020) also identified substantial performance differences for learners in a course offered in both asynchronous and synchronous formats, wherein asynchronous learners did not perform as well as synchronous students. While trainees did perform well in the synchronous virtual training programs offered throughout the COVID-19 pandemic, they were built as half-day sessions; the intention was to reduce screen time for learners who were not accustomed to working at computer stations for full days, often coming from mining or other industrial sectors. This is a likely contributor to why client firms prefer face-to-face offerings: a course offered over the span of three days takes six half-days to complete in a virtual classroom.

In feedback I have received from virtual learners, I have deduced that there is an increased potential for learning gaps when courses are taken in an asynchronous format. I can personally attest to the limitations faced by asynchronous learners who enter the latter half of Ontario's joint health and safety committee certification program. In the Part Two course (taken synchronously, per MLITSD program requirements), learners are required to consult printed copies of the province's *Occupational Health and Safety Act*: an unfamiliar task for those who participate in the online asynchronous Part One offering. To ensure the integrity of health and safety information provided to WorkSafeHealth learners, real-time, live options appear preferable. Training that does not positively impact the work of Ontario's employees creates a barrier for WorkSafeHealth in fulfilling its mandate of equipping workers with the knowledge and skills needed to reduce occupational injury and illness rates.

This problem of practice is unique to WorkSafeHealth given the organization's additional mandate from the MLITSD to provide services across a larger portion of Ontario than that to which the other HSAs offer services. Three of the four sector-specific associations have head offices, and most of their employees, in the Greater Toronto Area; this enables these HSAs to provide services to client firms in closer proximities. In comparison to the regional expanse in which WorkSafeHealth traditionally provides services—across approximately 1,883 kilometres, from Dryden to Belleville—other HSAs predominantly offer their services to firms from Barrie to Windsor. Given the quantity of commuting options in Southern Ontario, with GO Transit railway routes across this expanse, client trainees have enhanced access, reduced need for personal commutes, and diminished costs for additional living expenses when taking courses through system counterparts. WorkSafeHealth's head office is not located in Southern Ontario, and only five consultant-trainers in the province reside in the office's geographic area. In addition, these trainers are also often required to take on lengthy commutes to provide their services. Though efforts are taken to provide effective health and safety training in a timely manner, WorkSafeHealth faces more limitations than Prevention System counterparts that have more immediate access to their clients.

In addition to meeting training needs, consultant-trainers conduct site audits and industrial hygiene testing, among other services. The tactile nature of these exercises—involving the use of specialized instrumentation and visual inspections—requires WorkSafeHealth personnel to attend the site. Because some consultation work stems from client receipt of time-sensitive orders from MLITSD officials for contraventions of health and safety legislation, there is an escalated need to support these requests. As a result, it becomes difficult for consultant-trainers to arrange and facilitate courses (often days in duration) with urgent service

requests from client firms that cannot resume their own operations until compliance with regulatory standards is achieved.

Further Examination through a PESTLE Analysis

I have evaluated the problem of practice by applying a PESTLE, or political, economic, sociocultural, technological, legal—or legislative (Cordell & Thompson, 2019)—and environmental (Warner, 2010), or ecological (Cordell & Thompson, 2019), analysis framework to categorize WorkSafeHealth’s current training delivery operations. This model is best applied to a macro analysis of organizational dynamics to determine the influence of these factors (Cordell & Thompson, 2019). Though a PESTLE analysis denotes a qualitative approach utilized to assess internal operations (Hopkin, 2013), it can also be applied to identify influential factors external to an organization (Warner, 2010). I focus on the critical themes from this analysis next, and I provide a visual overview of the PESTLE analysis in Appendix C.

Given WorkSafeHealth’s mandate as a public health and safety service provider that operates under the auspices of the MLITSD with transfer payments from the WSIB, factoring in the effects of Ontario’s political system and economic considerations establishes a clearer portrait of these external influences. Organizational change is heavily contingent on budgetary restrictions that dictate WorkSafeHealth’s employee base and parameters through which the implementation of new service delivery methods can be achieved. Could these financial resources be better allocated if alternative methods to training service delivery are implemented? This would support remediation of the primary sociocultural and legal factors: procuring more equitable means to provide timely access to training across the vast geographic expanse for which WorkSafeHealth is responsible, thereby furnishing legislated health and safety knowledge and skills required to perform tasks safely at work. From a technological perspective,

WorkSafeHealth should determine whether its existing learning technologies can be utilized to enhance access to training sessions for larger participant groups. In addition to this technological facet of the PESTLE analysis, WorkSafeHealth should consider reductions in travel demands for consultant-trainers and course participants, reducing the potential for motor vehicle incidents. Environmental considerations associated with reductions in vehicle emissions are other suitable reflections. In addition to reducing the possibility of a motor vehicle incident, diminished travel requirements also reduce the carbon footprint that those assuming lengthy commutes otherwise impose on the environment.

Through this PESTLE analysis, I have identified touchpoints on all six considerations that indicate the need for a shift in current operations to address this problem of practice. These considerations have further fuelled my intention to investigate the guiding questions on which I elaborate next.

Guiding Questions Emerging from the Problem of Practice

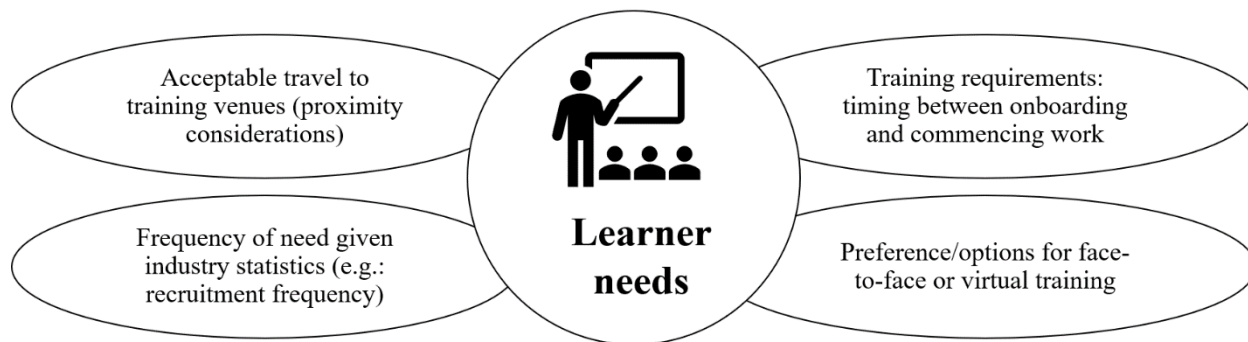
In my endeavour to determine the best means through which WorkSafeHealth personnel can offer timely, equitable access to health and safety education for clients across Ontario, I feel it is necessary to collect information that addresses the following four guiding questions.

First, I ask: what considerations pertaining to learner needs must be factored in to ensure that the solution results in equitable, appropriate, timely access to health and safety education? A thorough exploration of geographical factors and industry demographics, along with the learner needs captured below in Figure 2, would certainly assist me in enhancing my understanding of current barriers to timely access. Through examining these needs, I can also ensure that I have the information necessary to create a plausible, effective solution. Given the need to ensure

timely, equal access to health and safety education, gaining insights into this critical piece becomes paramount in ensuring learner needs will be met.

Figure 2

Themes to Examine in Determining Learner Needs



Note. Through client consultations and learner feedback survey data, some of the information regarding these learner needs will become readily apparent.

Second, in addition to the barriers faced by WorkSafeHealth personnel that I listed above, I question whether there are any other obstacles faced by internal consultant-trainers that reduce their abilities to facilitate health and safety courses. Though I have enumerated some issues associated with current operations, further inquiry into other potential hindrances may prove to be beneficial. In line with the participative and democratic leadership styles with which I identify the most, I am confident about the significant benefit that would result from engaging in additional dialogue with this group of critical internal stakeholders. Gathering more information to better diagnose this problem of practice will furnish necessary insights leading to the development of an optimal solution in an organizational change plan. Additionally, acquiring stakeholder feedback is likely to foster support for solutions that are aptly explored and address this issue.

Accumulating additional insights from consultant-trainers will support my ability to further assess this problem, bringing me to my third question: how do other training

organizations operating in similar conditions ensure the provision of effective services? By pinpointing whether human capital, technological resources, scheduling conflicts, or other barriers contribute to WorkSafeHealth's limited provision of health and safety education, I can better consider solutions, based on the best practices of other organizations, that create opportunities for enhanced training options.

My final question pertains to the supportive mechanisms that would be required for consultant-trainers if they must utilize newer approaches to delivering health and safety education. I question whether adjustments will need to be made to current policies and procedures; training, support, and other resources for consultant-trainers; potential implications to other departments and organizational systems resulting from operational shifts; and whether change efforts require adjustments to job descriptions or enhanced recruitment for additional personnel to offer services.

Influenced by my approaches to leadership and agency to effect change at WorkSafeHealth, next, I continue my exploration of this problem of practice by explaining my vision for change, and I rationalize why procuring a solution to address this issue is strongly encouraged. In addition, I reveal how influences within and beyond the organization can affect the implementation of potential solutions.

Leadership-Focused Vision for Change

Though WorkSafeHealth personnel offer consulting and auditing services, training sessions are the primary commodity offered by the organization. As one who works in the program development department with permission to explore opportunities to enhance this specific facet of operations, I am focused on shifting training delivery options to make them both engaging as well as accessible to clients.

In working toward the enhancement of training services, I intend to find the best means through which clients' employees are equipped with the information they need to work safely. There is increased potential for workplace incidents in situations where a lack of training and awareness of occupational hazards is present. Amick et al. (2015) pointed out the relationship between occupational injury reduction and health and safety training in a workplace's safety program. Dahl et al. (2022) recognized the specific need for supervisory training on workplace hazards to enhance organizational health and safety management systems. While Vu et al. (2022) expressed the need for safety training for all workplace parties, the authors emphasized management commitment to training, especially during the COVID-19 pandemic, to raise awareness of the SARS-CoV-2 virus and to enhance worker belief in organizational support at a time where massive shifts to traditional operations took place. Hiep et al. (2023) also recognized the relationship between safety behaviours and training, highlighting the importance of training during the pandemic. Though medical students in Braekman et al.'s (2017) study perceived health and safety training as unnecessary, the authors still emphasized the need for this education, given students' inaccurate perceptions of occupational risks. While Wogalter (2019) recognized the limitations associated with ineffective health and safety training opportunities, such as no measurement of performance during and after such sessions, the author still recognized the value of this hazard prevention tool. The MLITSD (2021b) also acknowledged training in its five-tier hierarchy of safety controls while reinforcing the employer's duty to provide training on safe work practices. Because WorkSafeHealth personnel provide training services while striving to reduce occupational injury and illness rates, it is important to address the limitations with the current delivery model. Therefore, my vision of equitable access to health and safety education that addresses these limitations aligns with the organization's

mandate. In addition, I must also consider external influences, described next, that affect organizational operations and can dictate the success of this change initiative.

External Stakeholders and their Impacts on Changes to Training Service Delivery

In considering WorkSafeHealth's organizational context, I acknowledge financial constraints that must be considered in designing an effective change plan. As a transfer payment recipient with funding furnished by Ontario's WSIB, WorkSafeHealth's funding requirements prohibit the accumulation of surplus; in turn, WorkSafeHealth works within its financial means by utilizing the budget it is assigned and makes efforts to not accumulate any surplus. Based on additional recommendations from the Office of the Auditor General of Ontario (2019), the MLITSD now collects unused funds from HSAs at the end of a fiscal year. The operational volatility of recent years—affected by the COVID-19 pandemic—has resulted in concerns with recruiting additional personnel in more diverse regions to address client needs, particularly when some firms have ceased operations due to their own financial limitations in recent years. The uncertainty about whether sufficient surplus could be accumulated to offer consistent full-time employment to new recruits stems from heavier financial constraints to which the organization must adhere. In addition, historically, WorkSafeHealth has striven to satisfy client demand with a consistent number of consultant-trainers since the association's inception in 2010. I feel compelled to illuminate this reality as it is likely to affect the means through which my vision is achieved. Other organizational leaders who are more intimately involved with the recruitment and selection of newer employees may be reticent to consider additional consultant-trainers when reflecting on the current operational budget. I do not feel that this barrier should deter a thorough exploration of this problem of practice, especially as implemented solutions will enable consultant-trainers to better fulfill the organization's mandate. However, from a macro

perspective, I must acknowledge the implications that potential funding streams—as well as potential declines in funding—can have on addressing this issue.

Internal Stakeholders and their Impacts on Changes to Training Service Delivery

It is important to ensure equitable access to health and safety training for those who, if they do not receive it, are at higher risk of an incident from working with occupational hazards about which they remain unaware. I firmly believe it is unfair that accessibility to immediate, engaging training—especially of this critical nature—is largely reserved for those who live in closer geographic proximity to training venues that provide courses on a more frequent basis. Similarly, measures to protect WorkSafeHealth’s employees, who are at heightened risk of motor vehicle incidents and other driving hazards, must be considered to protect organizational personnel. This is likely unsurprising, as this perspective stems from a health and safety professional who works for one of Ontario’s key public HSAs. Is it not suitable for a proposed organizational change plan to include health and safety measures for its own workers?

WorkSafeHealth leaders may not have initially recognized the gravity of this problem of practice as current health and safety education delivery methods have been in place since 2010. Lack of leadership emphasis on this issue is a potential contributor toward no prior shifts in training approaches. Authors (Ejimabo, 2015; Northouse, 2016; Wang, 2010) expressed the need for leadership support of and influence on decisions that affect operations. Additionally, though democratic leadership is characterized by joint decision making among stakeholders, Jasper (2018) expressed how those in leadership roles influence organizational decisions with the final word on them; despite the collaborative approach to decision making in democratic leadership, leader support is still required. In more recent discussions, such as the one in September 2022 to which I alluded earlier, leaders have acknowledged limitations and are more receptive to changes

to WorkSafeHealth's current training delivery model. Having been given the opportunity to explore this problem of practice in a leadership capacity has demonstrated the intention that the organization's leadership team has on producing a solution that addresses these concerns.

Chapter 1 Summary

After describing my dual role as an instructional designer and course facilitator with team leader responsibilities at WorkSafeHealth, I identified my leadership approaches as inherently democratic and participative. These resonate with the association's interpretivist (Capper, 2019) structure and culture, advocating for stakeholder involvement in organizational decisions, described in the section on WorkSafeHealth's context. After describing and framing the problem of practice with four guiding questions, I elaborated on the need for change through a PESTLE analysis, connecting these considerations to my leadership-focused vision for change. While working on this problem of practice, I am excited to explore solutions that will keep Ontario's employees safe and healthy.

Chapter 2: Planning and Development

In Chapter 1, I identified a problem of practice to determine how WorkSafeHealth can create more equitable health and safety training opportunities for learners across Ontario. Before proposing a formal solution, I further contextualize the need for organizational change to address this problem. In this chapter, I open by discussing the leadership approach and change principles that I can apply, and I highlight the framework through which I perceive what is required to produce effective change. After discussing WorkSafeHealth's organizational readiness for change with regard to the problem of practice, I propose three potential solutions to rectify the limitations associated with the organization's current training service delivery model.

Leadership Approach to Change

In this section, I add to the discussion in Chapter 1 regarding principles of participative and democratic leadership, and I enumerate the reasons why I select these approaches, given my prior experience with utilizing these styles and their alignments with WorkSafeHealth's organizational context and corporate culture.

In Chapter 1, I elaborated on my personal appreciation for and use of participative and democratic leadership, which DeBell (2019) and Northouse (2016) labelled as synonymous with each other. To Lewin et al. (1939), the democratic style was one of three approaches in the middle of a leadership spectrum, with top-down authoritarian leadership at one end and a *laissez-faire* leadership—or “nonleadership” (Northouse, 2016, p. 172)—at the other. Several authors (DeBell, 2019; Ferguson, 2011; Hilton et al., 2021; Jasper, 2018; Lewin et al., 1939) attributed group collaboration, commitment, and consensus in organizational change decisions as facets of democratic leadership; other authors associated these characteristics with participative leadership (Coffeng et al., 2021; Kim, 2002; Likert, 1979; Likert, 1981; Northouse, 2016; Vroom

& Jago, 2007). Another key component of democratic leadership is the encouragement of stakeholder expression as a means of fostering trust and empowering teams (Goleman et al., 2013; Hilton et al., 2021; Jasper, 2018; Lewin et al., 1939). Similarly, empowerment and trust are elements described in work on participative leadership (Coffeng et al., 2021; Howell & Wanasika, 2018; Kim, 2002). Democratic leadership is positively related to job satisfaction (John, 2020), as is participative leadership, given the same principled approaches (Kim, 2002), though satisfaction may be accumulated solely in situations of personal interest to stakeholders (Miller & Monge, 1986).

I embrace what I will hereafter refer to as the participative-democratic approach to leadership given my personal leadership experiences and the alignment of this consolidated style with my own desire to foster teamwork and encourage stakeholder expression. In my prior discussion on personal leadership positionality, I described how I applied this dual approach to prior change initiatives during my tenure with WorkSafeHealth as well as in an executive leadership role at a private career college. In the case of WorkSafeHealth initiatives, my drive to obtain stakeholder feedback has been embraced by both teammates and leaders alike. With a participative-democratic approach, I have facilitated change projects within the program development department in which I work, and I supported the creation of instructor-led virtual training offerings during the COVID-19 pandemic. Throughout this change initiative, it is my full intention to continue utilizing a style with which I, as well as my colleagues, are both familiar and comfortable.

In addition, I described how feedback acquisition from team members is integral to WorkSafeHealth's corporate culture: this applies to interactions among internal stakeholders as well as collaborative projects requiring external industry-wide input. Just as consultant-trainers

obtain client feedback when conducting industry-specific risk assessment exercises to establish consolidated lists of mitigating controls for occupational hazards, WorkSafeHealth leaders accumulate insights from internal personnel when making operational decisions. Upon proposing my intentions and approach toward exploring this problem of practice to the leadership team, it is no surprise that my recommended method was well-received by this group.

As a team leader who is also a course facilitator and instructional designer, I will take part in exploring this problem with a working group whose decisions are certain to influence WorkSafeHealth's approaches to health and safety training. I introduce the group's parameters later in this chapter and reiterate their involvement in Chapter 3 when describing change implementation. I feel it is duly important to acknowledge that the recommendations established by this working group will ultimately be examined by executive leadership for any potential drawbacks. However, the suggestions furnished by the team, given their relative expertise, are very likely to present effective opportunities through which access to training can be enhanced. T. W., a director in the organization (to whom I report and whose scope is highlighted in Appendix B), has entrusted me with an additional level of authority to make decisions where the working group may not achieve consensus. This reserved decision-making ability connects to democratic leadership, wherein a leader formulates final decisions after accumulating feedback from a working group (Jasper, 2018). In this way, I align my leadership approach with the interpretivist epistemology (Capper, 2019), in that I, as "a leader... may ensure that stakeholder voices are included, but [I maintain] the leader's own perspective, and in the end [make] the final decision" (p. 54). Northouse's (2016), description of participative leadership also highlights how a "leader consults with followers, obtains their ideas and opinions, and integrates their suggestions into the decisions about how the group or organization will proceed" (p. 118). While

I have been given this additional ability to make decisions given my experience in instructional design and course facilitation, I remain confident that consensus will be achieved, and no tiebreaker decisions will need to be formulated. I only intend to apply this agency in cases where the group does not come to a significant majority decision.

In addition to selecting a participative-democratic leadership approach because of a personal appreciation for and experience with its principles, a stakeholder-based method toward organizational change is a means to mitigate any potential neglect of hearing concerns from those who will be directly affected by operational changes. Because health and safety education is the prominent commodity offered by WorkSafeHealth personnel, insights from numerous departments, be they responsible for facilitation or support, are required throughout this initiative. By obtaining feedback from these different departments, rather than dictating change as an authoritarian leader or restricting the collection of feedback to an exclusive group (such as trainers), WorkSafeHealth personnel will be able to collectively determine the best means to address this problem of practice. Additionally, diverse perspectives and discussing optimal outcomes as a group will support the achievement of consensus from those involved. I anticipate this will positively affect the level of buy-in from personnel in various departments who are outside of the working group, given how they will know that their voices are represented by colleagues in the task force dedicated to this project.

The participative-democratic leadership approach aligns strongly with a structured process designed to collect group feedback in situations where organizational change is to be explored. Later, I situate this leadership practice in a formal, collaborative approach to collecting insights and systematically working toward consensus with input from experts. Next, however, I situate WorkSafeHealth's current context in a three-phase model of organizational change that,

when guided through to fruition, will create more equitable access to health and safety training for client industries in Ontario's workforce.

Framework for Leading the Change Process

After introducing Kurt Lewin's unfreeze-change-refreeze approach—referred to by Cummings et al. (2015) as the changing as three steps (CATS) method toward organizational change—I apply this practice to a consensus-based approach, known as the Delphi technique, that resonates with Lewin's democratic leadership principles and the author's three-step model. Throughout the discussion, my intention to thoroughly demonstrate the importance of acquiring stakeholder feedback at all levels in the support of change will be developed.

A Three-Phase Model Toward Organizational Change

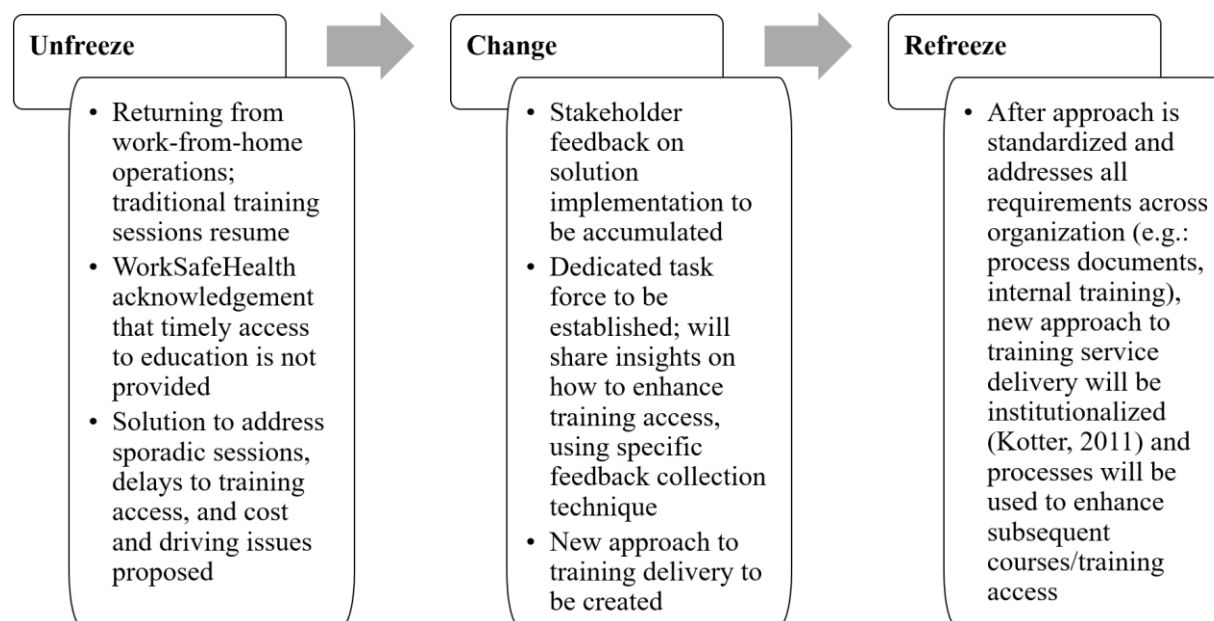
Lewin's unfreeze-change-refreeze model is acknowledged as a prominent, commonly utilized procedural approach for examining change initiatives (Bakari et al., 2017; Bartunek & Woodman, 2015; Burnes, 2020; Burnes & Cooke, 2013; Memon et al., 2021). It has been labelled as a simplistic approach, leaving multifaceted systems unaccounted for during organizational change (Bartunek & Woodman, 2015; Swanson & Creed, 2014), but these claims are contested, with Burnes (2004) arguing that the model is applicable not only when assessing organizational change, but also when examining shifts in larger society. Admittedly, while I recognize the utility of the CATS model when envisioning a macro approach toward a change initiative, I situate the more intricate implementation and monitoring and evaluation plans, on which I elaborate in Chapter 3, within the change phase, supporting a manageable process that can be communicated to stakeholders with ease. Given my preference to apply democratic leadership principles—a practice also originally conceived by Lewin et al. (1939) in the earlier half of the twentieth century (Burnes & Cooke, 2013)—the CATS model resonates with my

approach to leadership as it emphasizes stakeholder input during change (Bakari et al., 2017; Hussain et al., 2016).

Discussions regarding limitations imposed by current instructional delivery models have enabled WorkSafeHealth to identify the need for change; I elaborate on the organization's change readiness later in this chapter. In applying the CATS model, I deduce that WorkSafeHealth is unfreezing and ready to change. I elaborate on this in Figure 3.

Figure 3

Applying the CATS Model to WorkSafeHealth's Context



Note. In Chapter 3, I outline how a change implementation plan and a monitoring and evaluation plan supporting this initiative is easily situated in the change phase of the CATS model.

Obtaining Stakeholder Consensus through the Delphi Technique

Though it is commonplace for WorkSafeHealth personnel to provide input during change initiatives, the process I intend to employ—known as the Delphi technique—has not yet been utilized by the organization. This technique was first applied by the RAND Corporation in the 1950s to achieve consensus among experts on American munitions requirements to address Cold

War threats in the 1950s (Dalkey & Heimer, 1963; Loo, 2000). It has since been utilized to collect stakeholder feedback in numerous industry sectors, including health care (Beech, 1999; Cone & Unni, 2020), education (Ogbeifun et al., 2017), and in government settings (Sekayi & Kennedy, 2017). After assembling a group of stakeholders with intimate knowledge on an issue, a series of questions or statements is provided to the panel about the topic. Participants contribute potential solutions to address the problems highlighted in the statements, adding others if necessary; this feedback is then distributed for review by the entire group. Participants are then prompted to vote on the best solution from the list of possibilities for each theme. If consensus is not achieved in the first round of voting, subsequent rounds take place, though discussion on feedback is first conducted to ensure all points and potential approaches are clarified.

According to Ogbeifun et al. (2017), the Delphi technique is used to address assumptions about a problem, to achieve consensus, or to inform participants about differing perspectives on a topic. This approach will enable me to gather information from stakeholders across departments who are likely to be affected by this initiative, thereby enlightening all group members with varying considerations that may affect their own perspectives during the voting process. Discretionary application of the Delphi technique will also eliminate any chance of anyone in a leadership role—including myself—from monopolizing the conversation and pushing a specific means through which to proceed.

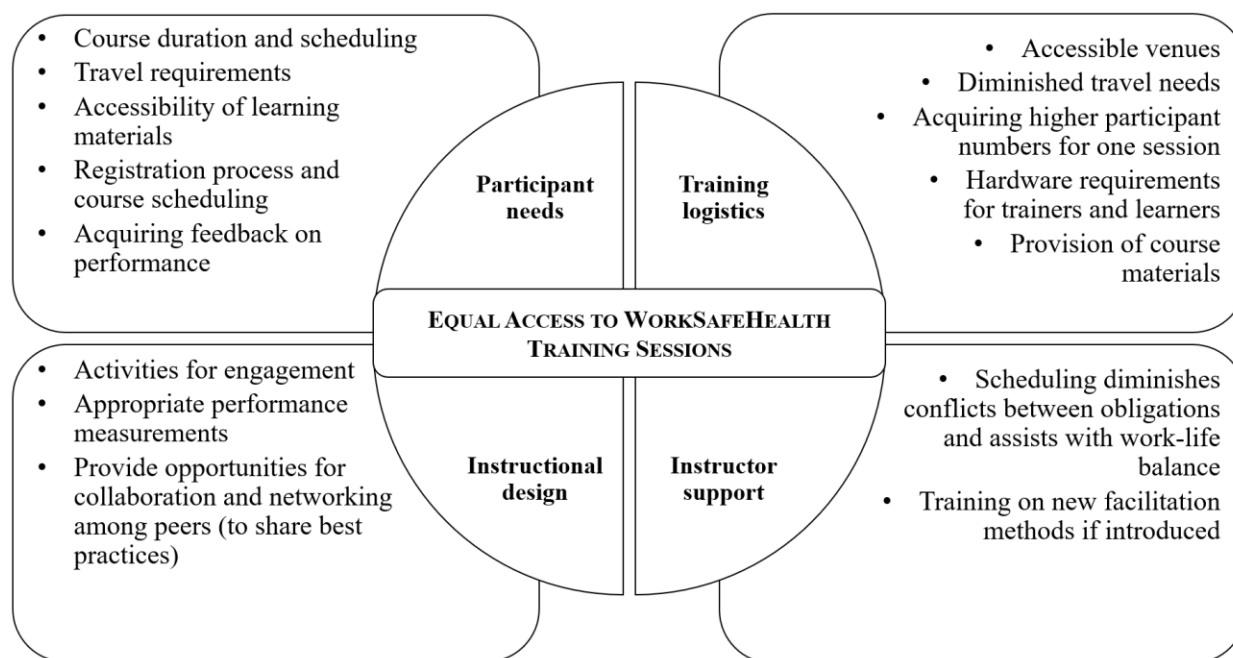
Because the collection, subsequent dissemination of, and voting on feedback is meant to foster consensus without providing opportunities for lobbying toward one specific approach, several authors encouraged ongoing anonymity of participants (Beech, 1999; Cone & Unni, 2020; Cuhls, n.d.; Ogbeifun et al., 2017). However, other authors (Kendrick, 2010; Loo, 2000) acknowledged that this is not always the case. Kendrick (2010) argued that discussion could

occur among experts between each voting round. In a modified iteration of the Delphi approach, Cone and Unni (2020) also noted open forum discussions between voting cycles. Given the traditionally collaborative approach toward organizational change at WorkSafeHealth, it would be reasonable to debrief on topic statements with the working group and subsequently brainstorm and debrief between voting rounds as required. Though there is no definitive rule on the number of voting cycles (Cuhls, n.d.; Ogbeifun et al., 2017; Sekayi & Kennedy, 2017), some authors argued for the use of three to five rounds (Cone & Unni, 2020; Kendrick, 2010; Loo, 2000). Beech (1999) warned that an increased number of voting rounds could result in a lower response rate from participants as the process continues. Given my organizational context and prior experience in comparable change initiatives, I do not anticipate shifts in participation with an increased number of voting periods.

Loo (2000) encouraged a three-step approach to applying the Delphi technique: determine the specific problem at hand; select a panel of pre-determined size; and facilitate the Delphi process. In Chapter 1, in addition to identifying my problem of practice, I listed a series of guiding questions to support further exploration. Before assembling the panel, it will be beneficial to continue refining these questions into topic statements to be brought forward and voted on by stakeholders from several departments, including instructional designers, customer support representatives, consultant-trainers, information technology specialists, and marketing and communications teammates, as well as stakeholders from WorkSafeHealth's leadership team. In Figure 4, I posit a list of subthemes to be converted into topic statements and explored by the working group.

Figure 4

Themes to be Explored with the Delphi Technique



Note. These themes address several facets of the change process to be considered; however, I am certain that more will surface throughout the change process. The addition of themes after inaugural meetings to discuss the scope of the initiative is unlikely to negatively affect dynamics or participation in subsequent Delphi rounds.

Given precedents based on desire for involvement in change-focused teams, I do not anticipate any issues with obtaining sufficient interest from those in various departments across the organization. However, I am concerned that, given the already-hectic schedules that WorkSafeHealth personnel navigate, uptake on this initiative will be compromised with limited availability. Ensuring working group members have sufficient time to participate by staggering meetings and voting cycles is one mitigating measure that I feel important to implement. Given the renewed importance of this problem of practice in recent organization-wide discussions, I am

confident that WorkSafeHealth's leadership team will support those who express interest in taking part in this group.

Finally, I must also consider the specific channel through which the Delphi approach will be facilitated. With numerous WorkSafeHealth personnel across the province, the organization's digital SurveyMonkey account—that guarantees respondent anonymity—will be a key means through which voting rounds of the Delphi technique are administered. According to Ogbeifun et al. (2017) computer technology is effective in facilitating this process. WorkSafeHealth personnel are comfortable with SurveyMonkey, especially as it has become a common method to collect information in other initiatives. Throughout the Delphi process, I will actively work as a consultant (Loo, 2000), or investigator (Cone & Unni, 2020) by setting deadlines for stakeholder feedback and accumulating and disseminating this information to the group. Follow-up meetings to clarify points and discuss progress will be held through WorkSafeHealth's Microsoft Teams platform, mitigating potential discomfort for those who would prefer not to use digital platforms with which they are unfamiliar. Through this approach, all stakeholders will be given an equal opportunity to contribute via accessible, easy-to-use digital tools.

The length of time required to aptly facilitate a comprehensive Delphi process remains to be established. As noted in Chapter 1, there is no emphatic pressure to change a training process that has been utilized since WorkSafeHealth's inception over a decade ago. This lack of urgency also creates an opportunity to examine this problem of practice more thoroughly vis-à-vis a democratic leadership approach: a technique that is best applied when change is not immediately required (Jasper, 2018; Northouse, 2016). I elaborate on personal assumptions that the change initiative will take approximately 10 months to complete when describing a proposed implementation plan in Chapter 3. However, progress will be contingent on the need to address

other priority projects and Ministry of Labour, Immigration, Training and Skills Development (MLITSD) directives that, if assigned, will take precedence.

Given the participatory nature of the Delphi technique, it is unsurprising that the process has been linked to the CATS model (Cone & Unni, 2020). Since the earlier twentieth century, Lewin et al. (1939) explored the effectiveness of democratic leadership in organizations and found that it contributed to the inculcation of trust among personnel. Given the additional outcomes of democratic leadership approaches, such as job satisfaction, to which the Delphi technique lends itself, I firmly believe that this approach will generate robust discussion and enable stakeholders to establish an approach that supports fulfillment of the organization's mandate.

Organizational Change Readiness

I have identified the need to explore adjustments to WorkSafeHealth's existing course delivery methods to enhance client access, reduce risks associated with lengthy commutes, and generate savings on training costs. In this section, I discuss Lewin's (1951) field theory before applying this concept to WorkSafeHealth's context, further demonstrating an inherent readiness for change to current delivery methods.

Lewin's Field Theory

In addition to principles of democratic leadership and the CATS model of change (Cummings et al., 2015), Lewin (1951) contributed field theory to describe factors propelling and discouraging change. These factors are identified at the unfreezing stage and are considered during the change phase (Bakari et al., 2017; Burnes, 2020). In field theory, individuals' goals take form based on driving forces (Bjursell & Engström, 2019; Burnes, 2020; Burnes & Cooke, 2013; Lewin, 1951; Swanson & Creed, 2014) that propel a person toward change, and restraining

forces (Bakari et al., 2017; Bjursell & Engström, 2019; Burnes, 2020; Burnes & Cooke, 2013, Lewin, 1951), or constraining forces (Swanson & Creed, 2014), that either hinder a desire for change or entice individuals to lean toward alternatives. To Lewin (1951), behaviours are heavily influenced by present circumstances, using the current situation as a determinant of what the future could hold. Thus, an individual's current situation is a predominant driving force toward change: it is only through consideration of current circumstances and potential outcomes that people are enticed to change (Burnes & Cooke, 2013; Lewin, 1951), through an action that Lewin (1951) referred to as locomotion (Burnes, 2020).

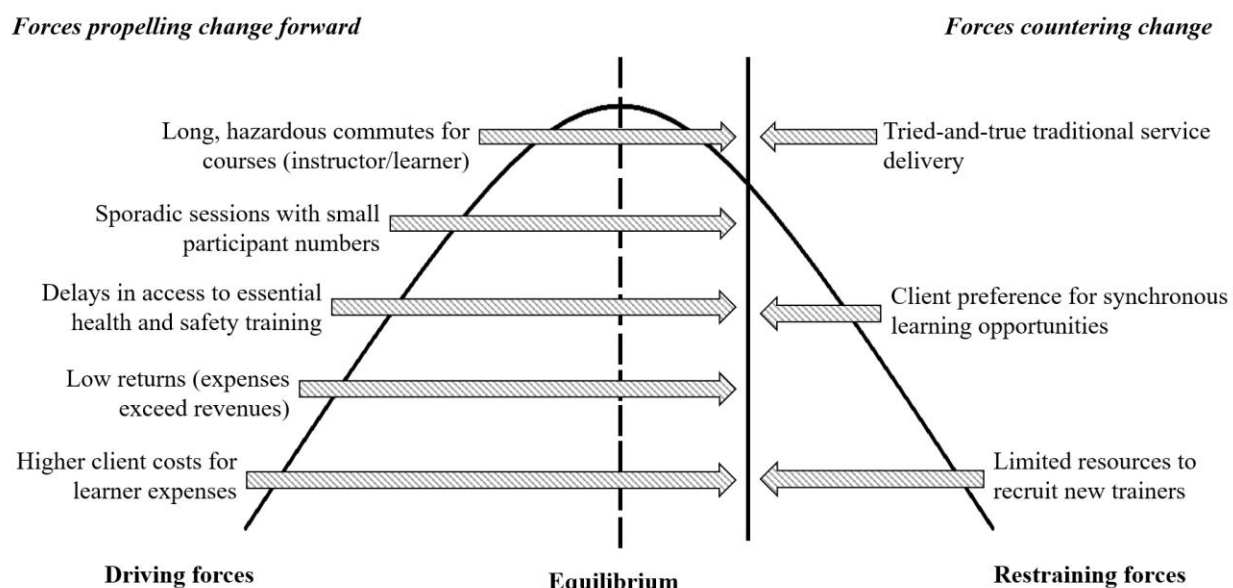
Though Lewin's initial focus was on an individual's perspectives toward change, Burnes and Cooke (2013) documented how Lewin also applied field theory to examine larger group dynamics and collective behaviours toward change. From an organizational change perspective, stakeholders rely on present circumstances and perspectives of what could occur in determining the benefits of change. I prefer a group-oriented approach to change, rather than focusing on the perspectives of an individual, as this better aligns with Lewin et al.'s (1939) democratic leadership tenets and my personal leadership principles. Application of the consensus-based Delphi technique to accumulate feedback from WorkSafeHealth stakeholders aligns with field theory, as it fosters collective identification of driving and restraining forces; it also supports the collaborative formulation of carefully constructed solutions that foster effective change.

In cases where restraining forces prevail, barriers restricting organizational capacity to change proliferate, whereas reducing these restrictive forces contributes to support for change (Bjursell and Engström, 2019). Effective, sustainable change occurs when an equilibrium (Bjursell and Engström, 2019; Lewin, 1951), or constancy (Cummings et al., 2015) is achieved between driving and restraining forces that, when equal, present a rational desire to maintain the

status quo instead of pursuing alternatives (Bjursell and Engström, 2019; Cummings et al., 2015). To Lewin (1951), equilibrium “refers to certain constellations of overlapping force fields” (p. 40) that place the opposing driving and restraining forces on par with each other. A visual depiction of these forces, with a summary of their applicability to WorkSafeHealth and my problem of practice, is presented in Figure 5. Next, I elaborate on the organization’s change readiness based on what is presented in the figure.

Figure 5

Applying Lewin’s Field Theory to WorkSafeHealth’s Change Readiness



Note. Given the imbalance between driving and restraining forces, a re-evaluation of current health and safety training approaches is necessary. While operational changes can mitigate concerns associated with expenses and occupational hazards, they must also address the key issue: timely, equitable access to essential health and safety education for Ontario’s workers.

Examining WorkSafeHealth’s Change Readiness through Field Theory

The current imbalance between driving and restraining forces in WorkSafeHealth’s context clearly indicates readiness for organizational change. I have shared how WorkSafeHealth

personnel at all levels acknowledge the need to re-examine current approaches toward training service delivery. Though equitable training access is a key goal, with WorkSafeHealth's mission toward occupational hazard reduction, the weight bestowed on reducing risk of motor vehicle incidents for trainers and trainees is a significant driving force toward change (no pun intended). However, a transition to asynchronous virtual training is not viable, as client preference for real-time interaction between learners and instructors has been made explicit. Similar inclinations have been expressed by others in recent years: despite exposure to asynchronous environments during the COVID-19 pandemic, a clear preference for real-time instruction remains (Baxter & Hainey, 2023; D'Souza et al., 2020). Between virtual synchronous and asynchronous virtual options, Azar and Tan (2023) determined that students prefer synchronous sessions. Given the reduced performance of asynchronous students (Guo, 2020) described in Chapter 1, and limited motivation and engagement in asynchronous sessions (O'Shea et al., 2015; Tobin & Hieker, 2021; Van Nieuwenhuysse, 2020), real-time instruction is preferable. Client inclination is a significant restraining force, or it emphasizes the need to formulate an alternative through which real-time instruction continues to be delivered. Further, re-examining costs associated with training delivery could inspire cost-cutting solutions that address situations with no financial return because of small participant numbers. Clients would also benefit from similar cost savings.

As change project leader, I will set the context and relay the driving and restraining forces in Figure 5 to working group members. After proposing a solution, in proceeding with the change phase, I will facilitate the Delphi technique to collect feedback. Working group members, given their respective expertise, will establish means through which the solution will generate

success. Before specifying how the group will guide the change plan, I discuss three potential solutions and rationalize my selection of the most appropriate one with which to proceed.

Solutions to Address the Problem of Practice

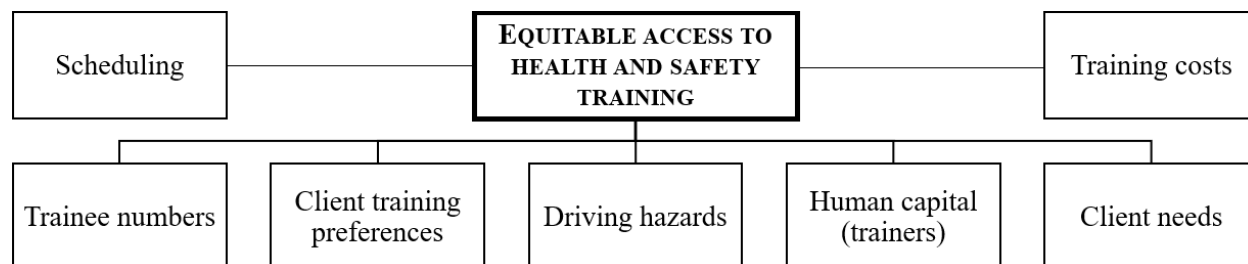
In this section, after pinpointing the areas in which organizational change must occur, I describe three potential solutions to address the problem of practice.

What Needs to Change?

Recall the question I posited as a problem of practice statement: *how can the lack of equitable access to health and safety education be addressed, thereby enabling WorkSafeHealth personnel to fulfill the organization's mandate?* In Figure 6, I list seven critical components that must be considered.

Figure 6

Themes to be Addressed in Solving the Problem of Practice



Note. I have discussed how the above factors affect WorkSafeHealth operations. These factors must be equally considered in creating a solution.

A successful change initiative would result in offering timely, real-time training to learners. Secondary benefits include a reduction in risks associated with extensive travel and increased costs for travel and living expenses, but most importantly, the solution would enable WorkSafeHealth personnel to provide trainees with more immediate access to the instruction and

skills they need to work safely. Below, I posit three possible solutions that encompass these factors, listing them from least likely to the best possible solution.

Option #1: Recruitment of More Consultant-Trainers

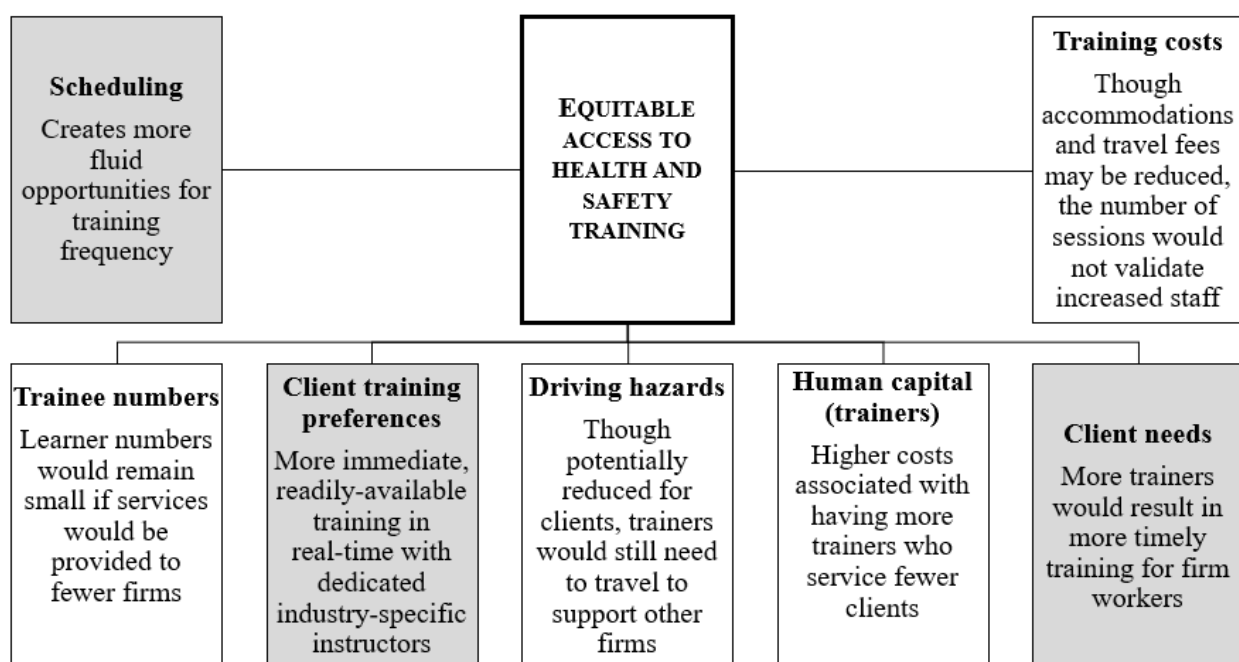
WorkSafeHealth consultant-trainers, from Belleville to Dryden, offer their services to clients across Ontario; with newer industry rate groups under the association's purview, the regions for which they are responsible have increased in geographic size. Given the small number of training personnel depicted in the organizational chart in Appendix B, these regions span hundreds of kilometres. Further logistical complications stem from the sector-specific expertise offered by some trainers; for example, a consultant-trainer who resides in Hearst can only support the forest products industry, given his experience in that domain. If a mining firm in the area requires legislated common core training, another consultant-trainer from the Kirkland Lake area commutes approximately 365 kilometres to train clients from that firm. Thus, a potential solution would involve the recruitment of more trainers to provide these services without delay to clients who would otherwise wait for a busy trainer to arrange a course.

Though it would benefit one industry-specific client to have a specialized consultant-trainer in closer proximity, the feasibility of hiring support in that region is limited for two reasons. First, it is common that an industry-specific firm to which support would be provided is the only one in the area. In the case of offering mining sector training to a client in Hearst, a consultant-trainer would provide services to Zentek, the company with mining rights to a local graphite deposit (Zentek, n.d.). The consultant-trainer could also offer services to Nortrax Canada, a supplier of mining and forestry equipment (Hearst Ontario Canada, n.d.), but these services are already provided by the forestry-focused consultant-trainer in the area. This solution is not economically viable, as a consultant-trainer cannot generate revenue by solely providing

services to one or two clients. Second, to support other industry-specific clients scattered across the region, the consultant-trainer would still need to travel to extraneous sites. Additionally, the number of support staff who assist consultant-trainers with scheduling and other work arrangements would also need to increase, which is not financially feasible. A summary of the benefits and issues with this solution is highlighted in Figure 7.

Figure 7

Pros and Cons of Option #1: Hiring More Trainers



Note. In this figure as well as in subsequent figures, shaded boxes represent the needs that would be met with this solution. Deterrents toward proceeding with this solution, noted in white boxes, outweigh the potential advantages for hiring more consultant-trainers.

Option #2: Consistent Training Calendars for Timely Course Offerings

In Chapter 1, I explained how consultant-trainers, with some clerical assistance from the customer service department, are predominantly responsible for establishing training arrangements with their clients. The development of a training calendar, with coordinated effort

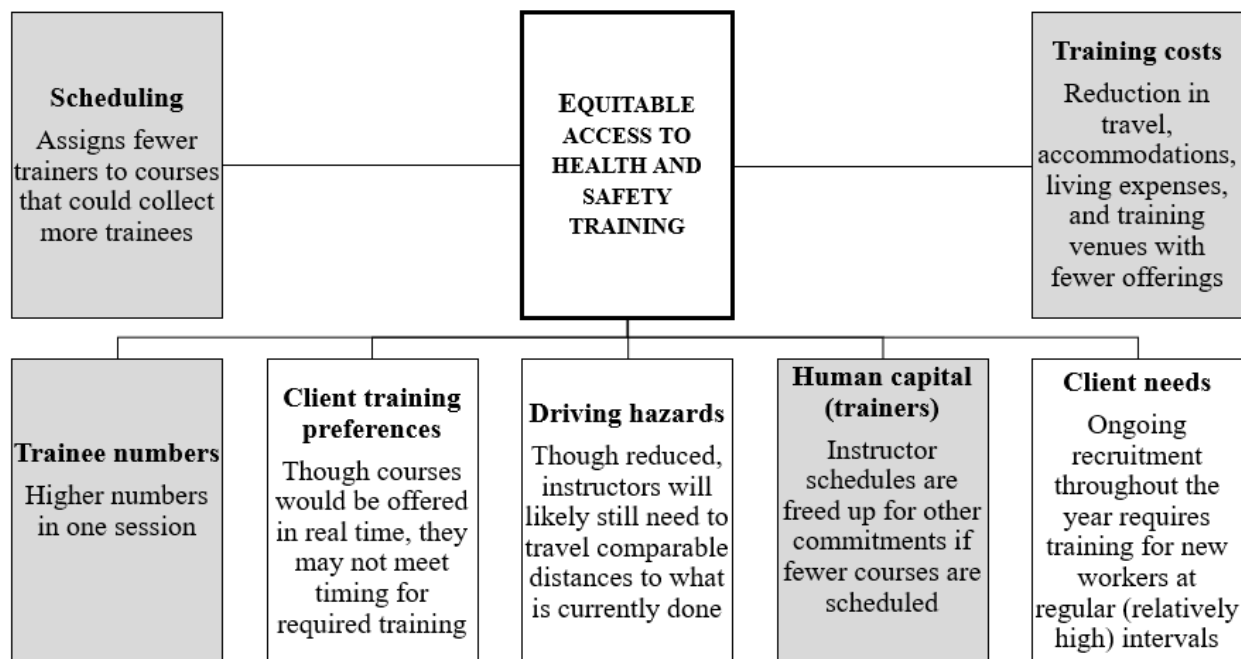
from all trainers in a region, wherein face-to-face sessions are consistently provided in an amenable time frame in centralized areas for larger numbers of trainees, is plausible. Support personnel from the customer service department could assume a lead role in formulating these schedules. A consolidated calendar could reduce the number of necessary sessions, increase trainee numbers per course, and reduce the risk of motor vehicle incidents stemming from more frequent travel requirements. In pursuing this option, consultant-trainer schedules can also be liberated for other projects, such as consulting work or industrial hygiene testing, for which they remain responsible. In addition, if these arrangements are made in consultation with client firms, the reduction in course offerings could also satiate the needs of industry firms and provide them with a consistent calendar through which they can plan for the training of their personnel.

A substantial caveat to taking this approach, however, pertains to a key issue expressed in the problem of practice: *timely* access to health and safety education. Consider the rapid turnover trends in the mining industry (Rolfe, 2022; MLITSD, 2022) and the forest products sector (Statistics Canada, 2021). The current frequency of course offerings reflects clients' needs to have trained employees who are hired throughout the year, often in sporadic intervals. It is unrealistic to assume that clients would recruit personnel with schedules that align with the training calendar. It would be unreasonable for WorkSafeHealth to assume that clients would be able to factor in the training schedule for an external service when they are preoccupied with ensuring that sufficient workers are on hand to operate machinery or otherwise work toward maintaining production quotas. Therefore, this potential solution does not address the need for timely, equitable access to necessary health and safety education. Though the establishment of a set training calendar satisfies some of the thematic requirements outlined in Figure 8, particularly regarding instructor availability for other training and consulting commitments, it is not the best

solution to address the needs of WorkSafeHealth clients, and more importantly, the learning needs of workers entering their respective industries who require information and instruction to work safely.

Figure 8

Pros and Cons of Option #2: Consistent Training Schedules



Note. Though increased participant numbers could be involved in training sessions and travel requirements for trainers could be reduced, this solution may inhibit successful accomplishment of providing timely health and safety training to employees who require certifications to work in their respective operations.

Option #3: Utilize Digital Learning Technologies to Create Hybrid Learning Sessions

WorkSafeHealth is equipped with the digital infrastructure needed to provide synchronous sessions simultaneously to face-to-face and virtual trainees, which is what constitutes hybrid learning (Rogers et al., 2003), also known as blended synchronous learning (Bower et al., 2015; Graham, 2021; Kahn & Hindman, 2021) and here-or-there instruction

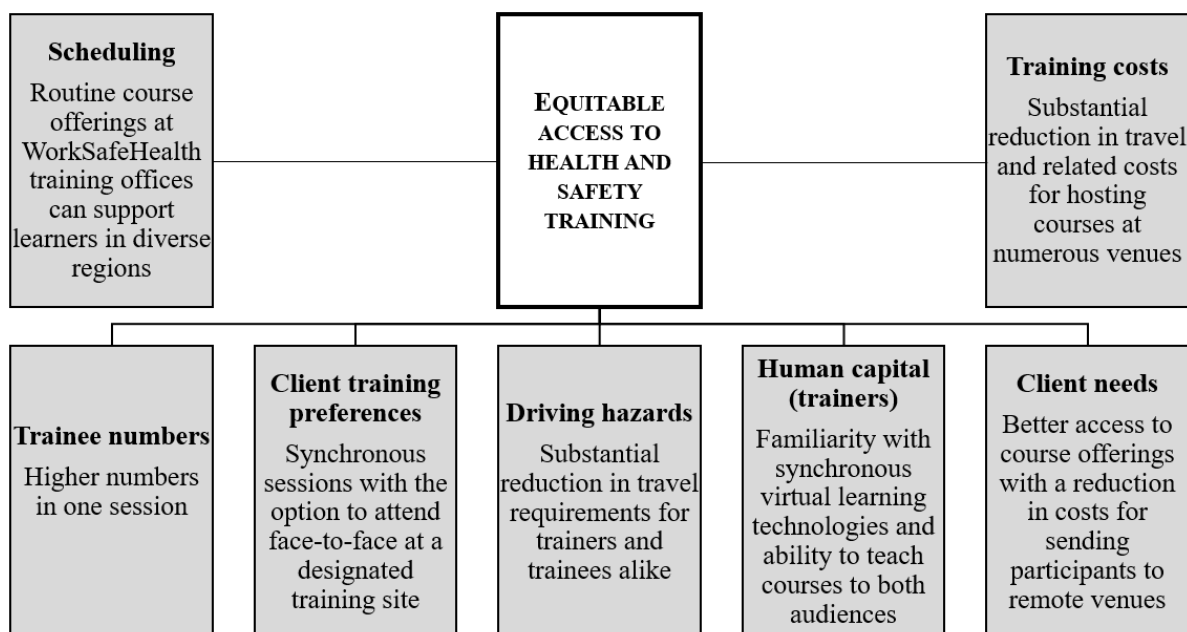
(Zydney et al., 2019). Should this option be pursued, the willingness to send participants to face-to-face sessions would reside with client firms, but a guarantee of more equitable, timely training access would be better offered by WorkSafeHealth personnel. The same learning experience would be provided, and the number of instructors required to host training sessions would be reduced, thereby decreasing trainer travel requirements. Online learning sessions enable institutions to provide services to learners across a wider geographical base (Bower et al., 2015; Davis et al., 2019; Lukenchuk, 2016; Park, 2011; Rogers et al., 2003), thereby contributing to more equitable access to education. Training institutions also experience cost benefits by recruiting learners wider areas (Davis et al., 2019; Phirangee & Malec, 2017). Cost benefits of online learning include reduced financial burdens for students who do not need to relocate and face associated expenses to study (O'Shea et al., 2015; Rogers et al., 2003). Similar cost savings would benefit WorkSafeHealth and client firms with the provision of hybrid learning opportunities.

Though online learning was gaining popularity before 2020 (Carver & Kosloski, 2015; Lukenchuk, 2016; O'Shea et al., 2015), virtual instruction was the standard during COVID-19 pandemic lockdowns and stay-in-place orders (Bangert et al., 2020; Blankenberger & Williams, 2020; Hamdi & Abu Qudais, 2020). WorkSafeHealth may also benefit from hybrid synchronous models to retain learners who become unable to attend face-to-face sessions because of isolation requirements after potential exposure to COVID-19 (or pathogens posing similar harm). It would be unrealistic to assume that lockdowns due to newer virulent agents would not prohibit the facilitation of face-to-face sessions. In pursuing this solution, WorkSafeHealth personnel can ensure that learners will be given consistent and equitable access to synchronous training content, ensuring real-time interaction with instructors that precipitates positive learning

experiences (Bower et al., 2015; Graham, 2021; Kahn & Hindman, 2021; Rogers et al., 2003; Zydney et al., 2018) Training rooms at WorkSafeHealth’s two locations are also already equipped with hardware to broadcast these synchronous sessions, resulting in no additional costs for learning environment setup. In addition to the benefits outlined in Figure 9, I encourage pursuit of this solution as a proactive measure to ensure WorkSafeHealth’s operations can continue in events where face-to-face instruction is impracticable.

Figure 9

The Best Solution: Developing Hybrid Learning Training Sessions



Note. Clients may still prefer face-to-face training options. However, if synchronous hybrid options are available, it mitigates a significant number of issues faced with WorkSafeHealth’s current delivery methods, making hybrid learning economical, accessible, and realistic.

Trainers who reside close to WorkSafeHealth’s primary training offices frequently offer sessions to firms with the same content required by those working for other, more remote, operations. If these sessions could include virtual trainees who would otherwise require the

support of travelling trainers, WorkSafeHealth personnel's travel requirements—replete with the risks associated with longer commutes—would be reduced. Cost savings will also be incurred by both WorkSafeHealth as well as client firms, making this solution an amenable one to all parties.

I offer this solution as a means to ensure that clients' new hires throughout the year who require certifications—and, more importantly, the knowledge to conduct work safely—have more timely access to this information. The pursuit of this solution is also meant to support young and inexperienced employees—groups particularly vulnerable to occupational incidents, as they are “three times more likely to be injured during their first month at work” (Workplace Safety North, n.d.). Similarly, hybrid learning also provides training opportunities for those undergoing transitions to new careers who would be at comparable risk by remaining unaware of the hazards with which they are faced in their new industries. Given the turnover faced in the mining and forest products sectors, the health and safety education that WorkSafeHealth provides becomes critical in supporting workers in these high-hazard professions, listed in the top 10 most dangerous occupations in Ontario by the Occupational Safety Group (2023b). Access to WorkSafeHealth's training programs for new recruits might otherwise take months to acquire, and if the current service model continues to be used, trainees will continue to be faced with travel and time away from home for this training. Given the critical need to ensure workers remain healthy and safe at work, this solution is best in ensuring that learners are provided with timely, equitable opportunities for accessing WorkSafeHealth's training sessions.

Because the content in a hybrid learning environment would be offered through the same modalities for both face-to-face and virtual learners, the same information would be provided, which supports WorkSafeHealth in working toward its health and safety mandate. Provided appropriate strides are taken to ensure that virtual audiences remain engaged in hybrid learning

sessions, this solution would mitigate any of the barriers toward optimal virtual learning experiences listed by authors whom referenced in Chapter 1 (Carver & Kosloski, 2015; Dymant & Downing, 2018; Guo, 2020; Hughes, 2010; O'Shea et al., 2015; Park, 2011; Tobin & Hieker, 2021; Van Nieuwenhuysse, 2020; Walker & Creanor, 2009). In facilitating the Delphi technique with a focus on hybrid learning to acquire input from WorkSafeHealth stakeholders, pursuing best practices toward this training delivery model will address the problem of practice and enable WorkSafeHealth to extend the reach of its health and safety message.

Chapter 2 Summary

WorkSafeHealth's ability to offer more equitable, timely training to client firms across the province is best addressed through the formulation of hybrid learning options. To fulfill WorkSafeHealth's mandate, hybrid learning supports the protection of the humans on the operator side of the machine guard, under the hard hat, or behind the welding aprons as they operate hazardous equipment. I am confident that, through the development of hybrid learning opportunities, equilibrium, according to Lewin's field theory (Bjursell and Engström, 2019; Burnes, 2020; Burnes & Cooke, 2013; Cummings et al., 2015; Lewin, 1951; Swanson & Creed, 2014), can be achieved. In Chapter 3, I link the CATS change model to a more definitive implementation plan focused on integrating hybrid learning into WorkSafeHealth's training suite during the change phase. I discuss other considerations, including the roles of organizational communication and program monitoring and evaluation, in guiding the change to fruition.

Chapter 3: Implementation, Communication, and Evaluation

Adjustments to WorkSafeHealth's current primary training delivery model will provide more equitable access to learners across Ontario, thereby addressing the problem of practice I highlighted in Chapter 1. In Chapter 2, after listing a series of possible strategies through which WorkSafeHealth can enhance this access, I recommended the adoption of a hybrid learning model to extend consultant-trainer reach to larger participant numbers with reduced risk and increased cost savings. To support this organizational improvement plan and explain how hybrid learning can be added to WorkSafeHealth's training suite, I begin this chapter by aligning the change phase of the changing as three steps (CATS) framework (Cummings et al., 2015) to an implementation model through which I envision successful change. I then elaborate on a communication plan, based on evidence-informed processes, that, if applied, will foster ongoing knowledge transfer throughout this initiative. After explaining a monitoring and evaluation plan to be applied throughout the hybrid learning project, I conclude Chapter 3 with a summary of anticipated next steps and future considerations.

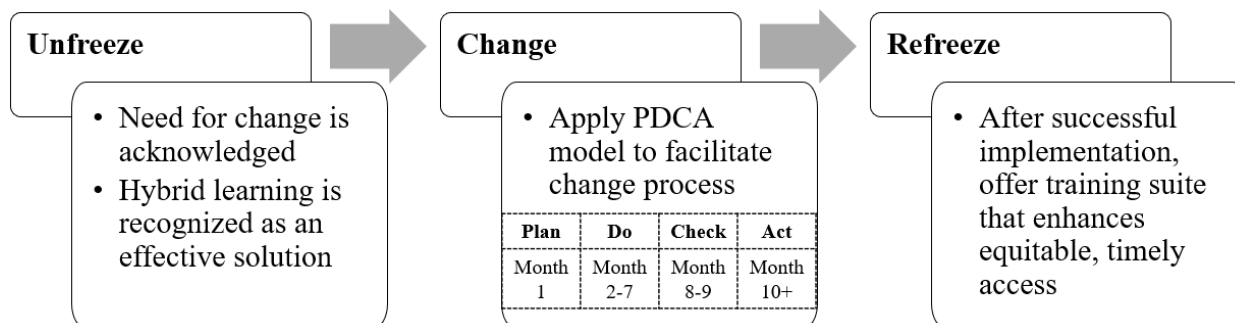
Change Implementation Plan

In applying the CATS framework, described in Chapter 2, I conceived a macro perspective of the need for and impact of change from the unfreezing to refreezing stages. In line with reflections from some authors (Bartunek & Woodman, 2015; Swanson & Creed, 2014) that the CATS approach does not provide sufficient opportunity to delve into plethora of considerations required in a change initiative, the intricacies of my proposed plan, particularly regarding implementation, are more clearly illuminated through a plan, do, check, act (PDCA) model within the change phase of the CATS framework. To proceed with plan implementation, I intend to announce the exploration of a hybrid learning suite as a solution toward enhancing

access to timely health and safety education. I situate the PDCA approach specifically within the change phase of the CATS model in Figure 10, as it better illuminates the detailed process through which change is to be approached.

Figure 10

Situating the PDCA Model in the CATS Change Framework



Note. The CATS change framework connects the Delphi technique and democratic leadership principles described in Chapter 2 to the entire change process, while implementation details are more thoroughly captured in a PDCA approach that is best situated in the change phase.

While the linear PDCA model heavily resonates with the plan, do, study, act model conceived by William Edwards Deming in 1950 (Deming, 2018), I opt for the PDCA model for three reasons. First, the term is utilized by authors (Manuele, 2014; Williams, 2020) and agencies (Ministry of Labour, Immigration, Training and Skills Development [MLITSD], 2019; Workplace Safety and Insurance Board [WSIB], 2019) focused on occupational health and safety, and it is also recognized by WorkSafeHealth personnel. Second, according to the Deming Institute (2023), the term ‘check’ denotes the official implementation of a more formal, less abstract, change plan—my goal as a scholar-practitioner who is focused on applied organizational change—whereas a ‘study’ phase prompts the exploration of results in the development of more theoretical, less concrete, forms of change. Finally, because the PDCA model supports change implementation as well as monitoring and evaluation within the change phase of the CATS

framework, applying a PDCA approach provides me with the opportunity to expand on the sequence of steps in this critical facet of a three-step approach toward change.

Description of Implementation Steps in Four Phases

In Appendix D, I posit eight steps—each with a series of sub-steps—to be accomplished through a PDCA lens. Given comparable progress in prior initiatives, I surmise that the plan will take approximately 10 months from inception to completion; however, as indicated in Chapter 2, MLITSD priority initiatives, if assigned, will take precedence, and may result in more time required for hybrid learning implementation. When considering the rapid transition to computer-based offerings during COVID-19 pandemic lockdowns, I anticipate similar timelines to adapt an existing program to fit in a hybrid modality. Later, when successful organizational change in this regard is institutionalized (Kotter, 2011), the organization can refreeze, and other courses can be added to WorkSafeHealth’s hybrid learning suite. Below, I elaborate on specific considerations and actions in each step of this implementation plan. While I discuss the PDCA approach in more depth later while describing program monitoring and evaluation, I apply this model to separate the four phases of this proposed implementation plan.

Phase 1: Plan (Month 1)

In previous chapters, I described how WorkSafeHealth personnel at all hierarchical levels recognize the need to adjust training offerings to ensure more timely, equitable access to health and safety education for clients. Therefore, I believe that an integral first step toward implementing this plan involves reinforcing WorkSafeHealth’s intentions to pursue hybrid programming. This communication must be designed to reflect that internal stakeholder voices have been heard—fostering buy-in and commitment toward the change endeavour (Coffeng et al., 2021; Goleman et al., 2013)—and that work to address concerns with current training models is to

take place. Furthermore, in this initial communication, a call for personnel to join a task force that will establish the best means through which hybrid learning will address the barriers in current training service delivery must be conveyed. Emphasis on representation from numerous departments, including consultant-trainers, program developers, customer care representatives, information technology specialists, and marketing personnel, is to be made explicit to further stimulate participation. After these initial communications during an all-staff meeting in the first month of plan implementation, I will call for representatives from these departments to join the task force.

Later in the month, stakeholders will attend a preliminary task force meeting to discuss project scope, learn about existing themes to be examined, and receive an introduction to the Delphi technique for contributing feedback. In Chapter 2, I described how the Delphi technique (Dalkey & Heimer, 1963; Ogbeifun et al., 2017) can be used to collect information from working group members who complete surveys and vote on results, working toward consensus achievement and action planning during change initiatives. Application of this technique provides me with three advantages: first, it aligns with my personal outlook on leadership, integrating participative (Howell & Wanasika, 2018; Northouse, 2016) and democratic (DeBell, 2019; Ferguson, 2011; Hilton et al., 2021; Jasper, 2018; Lewin et al., 1939) approaches. Second, it coincides with WorkSafeHealth's organizational culture and strategies adopted in other change initiatives, emphasizing encouragement of feedback from employees at all levels during change projects. Third, and perhaps most importantly, the Delphi process enables stakeholders to identify a comprehensive set of critical areas to be examined and continue deliberations on each theme before a concrete, effective action plan is formulated.

Phase 2: Do (Months 2-7)

In continuing through the planning phase, the Delphi technique—facilitated with as many voting and debrief rounds as necessary—will become an essential tool in addressing all facets to be considered in the development of a hybrid training suite. Though this is one of eight steps in this implementation plan, it is likely to take a significant amount of time in the second and third months where it is depicted in Appendix D. Throughout the task force’s initial examination of hybrid learning solutions, all-staff meeting updates will be conveyed to keep all WorkSafeHealth stakeholders abreast of the project’s progress. This will, in turn, generate further commitment toward adjusting training delivery models and providing all team members with the opportunity to ask questions and furnish insights into recommended approaches. After recommendations for preliminary policies, procedures, guidance sheets, internal facilitator training methods, course booklet templates, facilitator guides, and other documentation are accrued by the task force between the fourth and the sixth month, departments to which these documents and practices apply will work on building relevant materials. While the program development department develops a trial version of a hybrid session by adapting the layout of an existing course (keeping it separate from current face-to-face or other offerings), the customer care team will integrate new systems for course registration and training material distribution, while the information technology team will ensure training rooms are laid out in ways that fully support this instructional delivery method. After receiving final feedback from these groups, these tools are to be temporarily finalized, though they will be revisited when a more thorough check of the work takes place in later months. Task force meetings—conducted every three weeks at minimum—will continue to take place and progress will be disseminated across departments to minimize the potential for overlaps, divergences, or conflicting processes. Given the

dialogue-based nature of the entire initiative, I understand the importance that task force members will have in engaging stakeholders in their respective departments. Similarly, members will also empower their colleagues by encouraging further feedback on processes recommended by the task force. Through this knowledge exchange, the group can identify lingering issues or potential caveats associated with any proposed approaches. Further dialogue will ensue, and processes will be refined to the benefit of each affected WorkSafeHealth department.

Internal trial runs, or pilots, of any course material have been an integral part of WorkSafeHealth's quality assurance process. During these sessions, consultant-trainers and other participants are encouraged to provide feedback on course material and ensure the content meets necessary learning objectives. An internal pilot, wherein a hybrid session will be offered to WorkSafeHealth personnel, will be arranged when appropriate. In this case, the focus would not be on content, as course material adopted for hybrid learning exists in a face-to-face format. Instead, feedback on hybrid learning would be critical to collect to ensure that issues with this model of instructional delivery are detected and addressed before the course is offered to external participants. An internal pilot will also provide the necessary opportunity to begin preparing WorkSafeHealth consultant-trainers to facilitate courses in a hybrid environment. Given other traditional yearly operational objectives set by WorkSafeHealth leadership and the MLITSD, I anticipate that an internal pilot will be ready within six months. The session will be scheduled at least one month in advance to ensure several participants can attend.

Upon acquiring internal feedback, the task force will reconvene to discuss gaps and work within their respective departments to support the finalization of a program draft to be offered to external trainees. When appropriate, a training session for clients will be arranged: this will be offered at no cost, which is the standard for new courses released by WorkSafeHealth.

Historically, free sessions have been palatable to client firms looking to ensure their workers procure necessary certifications to work in their respective industries; I anticipate minimal issue with acquiring uptake for this session. In the interim, the instructor will be coached on hybrid facilitation methods based on established guidance documents. After the external pilot, learners will be asked to complete a feedback survey dedicated to the hybrid learning environment, wherein they will be given the opportunity to share feedback on their experiences as face-to-face or virtual learners. Drafts of these feedback survey tools are included in Appendix E. Instructors will also be encouraged to share feedback on hybrid learning facilitation methods. This feedback will be critically relevant to task force members and affected departments as they proceed toward evaluating hybrid learning effectiveness during the check phase, described next.

Phase 3: Check (Months 8-9)

After the course is facilitated to external participants, the task force will review learner and facilitator feedback and work in conjunction with respective departmental stakeholders toward adjusting the program structure and supporting documentation to maximize hybrid learning effectiveness. A review of accompanying policies and protocol documents must also take place to ensure their alignment with the entire hybrid learning model. A subsequent external pilot of the initial course should take place to ensure success before hybrid learning standards are applied to the development of other courses. If necessary, ongoing repilots of the course may take place to ensure that WorkSafeHealth's hybrid learning environment is engaging, palatable, and accessible. Recall that, in Chapter 1, I associated democratic leadership approaches with change initiatives that are not inherently time sensitive (Jasper, 2018). If more time is required to ensure hybrid learning is appropriately and effectively implemented, WorkSafeHealth's leadership team is committed to allocating additional resources to the project to see it to

completion. Upon successful execution of the last external pilot, processes that contribute to effectiveness will be established to a degree where work on the act phase can begin.

Phase 4: Act (Months 10+)

In this final phase, WorkSafeHealth can begin to work toward the refreeze stage of the CATS model for change (Cummings et al., 2015). Finalizing the program and making necessary adjustments to organizational system protocols and other documentation is the goal in the act phase. Institutionalizing these practices by engraining them as standard modes of operation within the organization (Kotter, 2011) will signify an end to this change project and indicate organizational readiness to refreeze. Work on hybrid learning will then continue indefinitely while this instructional delivery method remains palatable and addresses issues associated with unequal access to health and safety education. In Appendix D, I highlight that the act phase can begin as early as 10 months after the inception of this change initiative.

When standards are in place, the work of the task force will conclude, and individual departments will assume lead roles in enhancing systems to support hybrid education. Given their access to data in the customer relationship management database, WorkSafeHealth's customer care department will assist with the identification of other courses, based on popularity and applicability, that would be beneficial to offer through hybrid learning. After work is completed on this change project, WorkSafeHealth will be in a suitable position to expand on development of hybrid learning options.

Additional Considerations for Plan Implementation

In prior chapters, I described how WorkSafeHealth, despite its structural functional (Capper, 2019), or hierarchical, structure, prides itself on an organizational culture in which employee feedback on operations is actively sought in decision making, resonating with an

interpretivist epistemology (Capper, 2019). Given the success with this approach in other change initiatives, such as the formulation of a new set of corporate values in 2018 to which I alluded in Chapter 1, I believe that the reception toward hybrid learning will be inherently positive, provided the opportunity to contribute to this initiative remains open. In addition, common acknowledgement of the need to shift operations to ensure timely access to training sessions is very likely to contribute to collective recognition of this solution as a viable option. While I do not anticipate any outright dissent, I do expect some apprehension toward exploring a new instructional delivery method from those who perceive personal limited technological aptitude as a barrier toward facilitating courses with impact. Instructor comfort, or “perceived ease of use” (Wingo et al., 2017, p. 22), of digital technologies, is related to reception of and desire to use virtual learning modalities (Alea et al., 2020; Elzainy et al., 2020; Johnson et al., 2022; McGee et al., 2017; Shreaves et al., 2020). Similar apprehensions were expressed when WorkSafeHealth operations shifted to virtual training during the COVID-19 pandemic. Professional development has been recognized as a mitigating factor to enhance instructor comfort levels with virtual courses (Berry, 2019; Gregory et al., 2020; McGee et al., 2017; Wingo et al., 2017). Though consultant-trainers may revisit these concerns, I am confident that instructor preparation and support will extinguish any unease.

WorkSafeHealth’s leadership team has already indicated support for the exploration of hybrid learning to address this problem of practice. I do not foresee significant financial or human resource barriers that would hinder the development of a task force to focus on this project; on the contrary, an initiative of this nature is very likely to become embedded in contributing employees’ performance plans, demonstrating the priority assigned to addressing current training service delivery limitations. Revisiting the 2018 Great Place to Work survey data

highlighted in Chapter 1, wherein fulfilling WorkSafeHealth's mandate was found to be a key motivator to those working for the association, I firmly believe that stakeholders will want to assume active involvement in formulating a course delivery method that will serve as a vital means through which the health and safety message is offered to clients.

Finally, I feel compelled to allude to my personal approaches to leadership, described in Chapters 1 and 2, wherein I highlighted how a democratic approach is best utilized in situations where time-sensitive change is not required (Jasper, 2018). Though I surmise that this project will take 10 months—based on comparable project durations—WorkSafeHealth is not in a compromised position if this initiative takes longer to work through. The organization has relied on face-to-face course delivery since starting operations in 2010, and it is not in a vulnerable position through which it faces client attrition. I am not implying, however, that the exploration of this initiative is unimportant: hybrid learning opportunities will address this critical problem of practice while enhancing the association's service delivery capabilities. If my suggested duration is insufficient, WorkSafeHealth's focus will be on ensuring that hybrid learning is properly explored before any offerings are consistently provided to clients. Moreover, in leading this project through the participative-democratic approach described in prior chapters, I align my own goals and processes with those that coincide with the Delphi technique and the establishment of a task force, rich in collective insights that will guide the project to completion.

At the beginning of this section, I indicated that I would further elaborate on the PDCA model as it applies to monitoring and evaluation of this change initiative. Given the relevance of this model to the execution of an implementation plan, however, I deemed it appropriate to demonstrate the linear progress and steps for each phase. Before further describing these four

steps in terms of monitoring and evaluation, next, I elaborate on a communication plan that will support this hybrid learning project.

Plan to Communicate the Need for Change and the Change Process

Communication—a bi-directional exchange of information (Adiguzel, 2019), with rich, interactive discourse (Lewis, 2019)—has been referred to as “the foundation of organizational existence” (Falkheimer & Heide, 2018, p. 73) and “the glue that keeps the collaboration ecosystem together” (Kuenkel et al., 2021, p. 89). Though Lewis (2019) named a lack of corporate resources and conflicting organizational priorities as barriers to change, the author, among others (Dahlman & Heide, 2020; Kotter, 2011), emphasized the relationship between limited or ineffective communication and the failure of a change initiative. To ensure successful implementation of a hybrid learning program suite at WorkSafeHealth, I recognize the need for a formal plan to support knowledge transfer throughout this project. In this section, I describe how communication will be used to keep all stakeholders informed throughout the adoption of this new training delivery method.

After aligning the consensus-based approach described throughout this organizational improvement plan with evidence-informed processes supporting effective communication, I discuss a knowledge transfer, or mobilization, plan (Lavis et al., 2003) through which communication will remain fluid among WorkSafeHealth personnel and relevant external parties. To conclude, I highlight the communication tools through which stakeholders will remain informed of progress and milestones throughout this project, from inception to fruition.

Communicating about Hybrid Learning through Evidence-Informed Processes

During preliminary change plan design, a core stakeholder group—known as a guiding coalition (Kotter, 2011) or a container (Kuenkel et al., 2021)—relies on communication to

determine the scope and parameters of a change initiative. According to Kotter's (2011) fourth step of the author's eight-phase change model, a carefully formulated change plan addressing the design, intentions, and goals of the initiative must be disseminated to the broader organization, with the goal of garnering support and fostering enthusiasm toward the project. In addition, organizational stakeholder feedback can also illuminate lingering gaps in a change plan (Conrad & LeMay, 2020) and sources of resistance (Kotter, 2011). In applying these considerations to this improvement plan, I envision the hybrid learning task force as the container that will explore diverse facets of this initiative, providing insights into how this shift will influence WorkSafeHealth operations. Working group stakeholders, with their respective knowledge of specific departmental procedures, will communicate with task force counterparts to carefully establish the parameters through which hybrid learning is to be implemented. The Delphi technique, described in detail in Chapter 2, will permit a fluid, unbiased exchange of this information within the task force to ensure all considerations are addressed. In addition, communication with other WorkSafeHealth personnel will support the task force in ensuring success with additional insights into the change project from the broader organization.

While members across all organizational levels assume varying roles in communicating about change, some authors posited that this responsibility best resides with leadership (Adiguzel, 2019; Dahlman & Heide, 2020; Hustus & Sarno Owens, 2018; Kotter, 2011; Kuenkel et al., 2021). Falkheimer & Heide (2018) argued that top-down communication is an effective means to discuss change in smaller organizations, while change efforts in larger corporations, given their relative complexities, require engaged discourse from stakeholders across an organization to produce effective change. Lavis et al. (2003) also described the positive impact of communication conveyed by those in leadership roles; however, the authors posited that non-

leader researchers can communicate effectively in conjunction with “knowledge brokers” (p. 226) who hold credibility among message recipients. Without personal formal leadership agency, I will rely on contributions—especially in the preliminary phases—from WorkSafeHealth’s leadership team in communicating the need for and endorsing this change.

Conversely, some authors emphasized communication about change from all levels of an organization (Burnes et al., 2018; Conrad & LeMay, 2020; Zins & Illback, 1995). Burnes et al. (2018), who documented some of Kurt Lewin’s contributions to the literature on change initiatives, advocated for wider discourse among all stakeholders to effect positive change. When considering the successful implementation of prior change initiatives at WorkSafeHealth through collective exploration, as well as an organizational culture in which bi-directional communication is consistently encouraged, I believe that a more suitable approach to communication better resonates with the approaches discussed by Burnes et al. (2018) and other authors (Conrad & LeMay, 2020; Zins & Illback, 1995).

Conrad and LeMay (2020) described their respective successes in leading organizational change efforts as leaders of peer groups. Through collaboration, transparent discourse, and even constructive conflict, Conrad’s team was able to enhance a college student support program, and LeMay’s group redesigned a general education curriculum. In using the Delphi technique to procure feedback from the task force, I identify with LeMay’s approach to change, which included surveys to collect insights from an internal committee of subject-matter experts that worked toward consensus achievement for a curriculum that “prepares students for success beyond college and into the workforce” (Conrad & LeMay, 2020, p. 111). Like Conrad and LeMay (2020), I approach this change initiative as a leader “from the middle” (p. 107); both authors were in faculty positions when they embarked on their respective change initiatives. I

will apply similar principles in fostering a collaborative stakeholder approach within the task force, utilizing the participative-democratic leadership methods on which I elaborated in Chapters 1 and 2. Though I will lead this initiative, I recognize that my voice alone is largely insufficient in communicating about progress and successes throughout this change project; hybrid learning task force members will also assume critical roles in maintaining communication among organizational personnel and with external stakeholders. Next, I elaborate on the respective communication roles of all groups by situating their contributions in a knowledge mobilization plan (Lavis et al., 2003).

Communicating about Hybrid Learning with Knowledge Mobilization

According to Lavis et al. (2003), five questions comprise a framework for effective knowledge transfer: three of these questions pertain to the message itself—the *what*—and those who communicate, or the *who*. The two remaining questions prompt reflection on the tools used to transfer knowledge—the *how*—and the effectiveness of knowledge mobilization. While I furnish a visualization of the knowledge mobilization plan in Appendix F and elaborate on the answers to each question in Appendix G, next, I group these answers and summarize a plan for knowledge mobilization.

Like Kotter (2011), I believe that the success of a change initiative is dependent on the initial urgency bestowed on the project. Though there is organization-wide recognition of the need to adjust WorkSafeHealth training offerings to enhance access to courses, a level of urgency must still be conveyed that places priority on this project and entices stakeholders to participate. This urgency is meant to foster further interest in a change initiative that may be otherwise regarded as a lower priority; I previously alluded to how WorkSafeHealth’s training

delivery model has remained largely untouched since the organization's inception. Initial communications to the broader organization are best relayed by WorkSafeHealth leadership.

As the task force works through this project, my working group counterparts and I will assume roles in continued communications during all-staff meetings. Task force members who will be involved in formulating WorkSafeHealth's approach to hybrid learning will be valuable, active contributors in these communications, regarded as credible sources (Lavis et al., 2003) and voices representing the needs (Burnes et al., 2018) of their departmental core groups. Receiving messages on this initiative from colleagues who are active contributors will foster support from members of their respective departments. To ensure interdepartmental communication, therefore, task force members will also actively maintain discourse about hybrid learning within their respective teams. Members will act as connectors (Lewis, 2019) in disseminating progress and insights to those in their respective departments. In encouraging stakeholder feedback within their own teams, working members can collect additional insights and return with these for further discussion during task force meetings, fulfilling the critical role of connectors (Lewis, 2019). Through this additional communication outlet, concerns and apprehensions—and even potential outright dissent—toward the initiative may be identified and alleviated by trusted partners within a given department. Though dialogue is an important factor in addressing negativity toward a change initiative, leaders within their respective departments will also assume a continued role in endorsing the project and reinforcing the need for change within their own teams. As the team leader, I will also participate in various department meetings to ensure ongoing communication about the initiative's progress is maintained. Through my own participation, I can also listen to questions and insights from each department; in addition, I can also ensure that communication remains consistent in frequency as well as in messaging.

In addition to the communications among WorkSafeHealth personnel at all levels and within respective departments, additional discourse among external parties, such as the MLITSD and the association's clients, must also be maintained when appropriate. It would not be timely to announce the introduction of hybrid learning to clients at the inception of this change initiative; however, consultant-trainers and the marketing department will assume prominent roles in raising awareness among these external stakeholders when a course offering is more readily available. I encourage consultation of the table, presented in Appendix G, in which I furnish additional details on the knowledge mobilization plan and how WorkSafeHealth personnel will engage in all communications when appropriate. Next, I conclude this section by listing the channels through which communication will be conveyed.

Communication Channels

Because WorkSafeHealth personnel are dispersed across Ontario, standard organizational communication tools are inherently digital in nature. The organization's Microsoft Teams platform is an effective tool for meetings (Frick et al., 2021; Hargreaves et al., 2022; Hu, 2020; Lai et al., 2021; Vauhkonen, 2020), file sharing (Frick et al., 2021; Vauhkonen, 2020), collaborative file editing (Hargreaves et al., 2022; Vauhkonen, 2020), and video calls (Frick et al., 2021; Hargreaves et al., 2022; Vauhkonen, 2020), especially for geographically dispersed groups (Hu, 2020; Lai et al., 2021; Vauhkonen, 2020). This platform serves as the hub for a vast majority of written interoffice communications and virtual meetings. Other communication media include email and telephone conversations, though their use has diminished since WorkSafeHealth's adoption of Microsoft Teams in 2019. Given the success I have witnessed with Microsoft Teams as a medium to foster dialogue, I intend to utilize this tool to conduct meetings, divulge progress, and receive questions from those who inquire about the project. I

will also use this platform to host meetings among task force members, complementing the feedback acquired during these meetings with the use of a SurveyMonkey account to collect insights in the Delphi surveys. In addition to providing anonymized survey feedback to this working group, I will summarize the data in virtual presentations and documents to ensure readability and accessibility. In addition to providing copies to task force members, I will also furnish this information to WorkSafeHealth's leadership team to keep management informed of the task force's progress. Summarized iterations of these presentations and documents will also be made readily available to the broader organization during all-staff meeting presentations.

With the inclusion of hybrid learning as a standing agenda item during all-staff meetings, the task force will share information at regularly scheduled intervals. Feedback in an open forum will be encouraged both during these meetings as well as through messages posted on Microsoft Teams or shared via email. Because successful change is contingent on routine and ongoing communication (Kotter, 2011), in addition to progress updates during all-staff meetings, follow-up emails will be provided, capitalizing on the value of this additional communication method (Falkheimer & Heide, 2018; Lewis, 2019). In addition, hybrid learning will be added as a standing agenda item during department meetings, providing task force members with other forums through which to discuss progress and collect feedback. I also intend to participate in these meetings: through communicating this intention with respective department leaders, I can ensure that hybrid learning has been added to each agenda. I am grateful for the endorsement I have received from the leadership team at large, confident that it legitimizes this request.

In this section, I have illuminated the strategies and tools through which communications will be conveyed, demonstrating how these techniques are based on evidence-informed processes that lead to successful organizational change. Though I focus on communications predominantly

in the plan and do phases of the implementation plan described above, I provide additional information on the need for communication with external parties during the check and act stages in the table in Appendix G. Next, I emphasize the role of communication as one facet of the larger monitoring and evaluation plan that will also support this initiative.

Change Process Monitoring and Evaluation

Earlier in this chapter, within the change phase of the CATS framework, I applied the PDCA model to formulate a change implementation plan with a linear approach toward the adoption of hybrid training service delivery. This model also becomes critical in the monitoring and evaluation practices on which I elaborate in this section. While program monitoring is characterized by collecting data and assessing ongoing progress (Agbenyo et al., 2021; Kuenkel et al., 2021), program evaluation involves the use of this data to measure the performance (Newcomer et al., 2015) or impact (Agbenyo et al., 2021; Saunders, 2016) of an initiative, utilizing the information to gather lessons learned (Kuenkel et al., 2021) and answer questions pertaining to the effectiveness of a program, policy, or other activity (Newcomer et al., 2015). After providing a rationale for applying the PDCA model, I list the tools and measures I will use to track progress throughout this project. I then discuss how potential gaps that arise will be detected and addressed through ongoing continuous improvement.

Health and safety professionals are familiar with the PDCA model for monitoring, evaluation, and continuous improvement. Manuele (2014) and Williams (2020) referenced the PDCA cycle in their respective discussions on establishing health and safety management systems and workplace best practices. Ontario's WSIB (2019) also encouraged a PDCA approach toward continuous improvement in its Health and Safety Excellence incentive program. The utility of this model is apparent in other WSIB publications, including a compilation of

successful evidence stories written by Health and Safety Excellence program award recipients (WSIB, 2021) and in updated program requirement documentation (WSIB, 2020). The MLITSD (2021c) also explicitly recognized the utility of this model in enhancing workplace health and safety. Given my personal familiarity with this model, I believe the PDCA approach will prove effective in monitoring progress throughout this initiative and will enable swift identification of opportunities for improvement during program evaluation. In addition, my counterparts at WorkSafeHealth also recognize the simple-yet-robust efficacy of this approach and are certain to be amenable to its use given their comfort with the model. WorkSafeHealth is an approved provider of the WSIB's Health and Safety Excellence program, further illustrating consultant-trainer familiarity with this tool.

Though Manuele (2014) and Williams (2020) applied the PDCA approach to occupational health and safety practices, their respective descriptions of this model align closely with the steps I intend to take throughout WorkSafeHealth's hybrid learning project. Both authors associated the planning phase with the selection of objectives and modes of safety program implementation. Comparably, the task force will review and establish items to be examined before proceeding with the development of an effective hybrid learning change plan, thus requiring a collaborative approach toward the development of this robust set of considerations. In the do phase, further development and implementation of selected strategies and tactics to effect change is to take place (Manuele, 2014; Williams, 2020). In the case of the hybrid learning initiative, departments must be involved in the development of processes and protocols that will affect their own operations. Task force members will become critical in communicating about these adjustments during meetings; this will support the assurance that overlapping or conflicting processes across organizational systems will be detected and

addressed during these preparations. The role of members as containers (Kuenkel et al., 2021), described in the prior section on change communication, within their respective departments will support this ongoing dialogue as well as monitoring throughout this phase of the initiative.

When working through the check phase, Manuele (2014) emphasized the measurement of performance against identified objectives, while Williams (2020) highlighted the need to ensure compliance with new practices. While I believe it is important to determine whether hybrid learning practices are being applied as designed, I would not want to encourage continued use of practices that create gaps in this training suite. In this step, the acquisition of feedback from internal and external stakeholders, when appropriate, will be paramount in supporting the identification of processes that must shift to support a functional hybrid learning suite. Continued efforts toward the finalization of approaches to hybrid education in this evaluation phase will only prove effective if barriers toward its enhancement are detected and addressed. At this point, in the act phase, Manuele (2014) and Williams (2020) agreed that remedial actions stemming from lingering gaps must be taken. In the case of WorkSafeHealth's hybrid programming, shifting hybrid learning approaches at this point to ensure ease of access and learner engagement while addressing technical or other operational issues will become important.

I intend to employ similar techniques in both communication and monitoring and evaluation throughout this change initiative. In Table 3, I list the three primary tools that will support execution of this plan, which will be valuable in monitoring for gaps and ensuring they are rectified. Further explanation of each measure is provided next.

Table 1*Tools and Measures Supporting a PDCA Approach to Hybrid Learning*

Phase	Stage Goals	Rationale	Measurement Tools
Plan (Month 1)	Announce exploration of hybrid learning	Make clear WorkSafeHealth’s intention to explore hybrid learning as a means of providing more equitable access to health and safety education Determine interest for and create the dedicated task force to work on the project; solidify scope with the group	<ul style="list-style-type: none"> • Meetings (when conducted) • Digital correspondence
Do/Check (Months 2-9)	Administer the Delphi technique to task force members Keep WorkSafeHealth stakeholders informed and involved Acquire feedback from internal/external participants	Develop a hybrid learning suite (start with one program) and identify procedures to be shifted/created to support hybrid learning Acquire feedback from internal personnel on progress and approaches to be taken Engage departments in the development of processes specific to their needs (based on task force recommendations) Identify gaps for continuous improvement while solidifying best practices in building one hybrid learning course; schedule sessions with internal trainees to collect feedback on effectiveness (subsequently, acquire external trainee feedback)	<ul style="list-style-type: none"> • Surveys • Meetings • Meetings (when conducted) • Digital correspondence • Surveys • Meetings
Act (Months 9/10+)	Solidify hybrid learning practices	Finalize first hybrid program and accompanying organization-wide procedures to ensure the hybrid learning system is fully functional and in place	<ul style="list-style-type: none"> • Surveys • Meetings • Digital correspondence

Note. The plan and do phases contribute to program monitoring, while the check and act phases support evaluation and continuous improvement. Digital correspondence includes instant messages, emails, and digitized meeting minutes and recordings.

Surveys

In line with qualitative monitoring approaches that require stakeholder consultation for views and opinions on progress (Agbenyo et al., 2021), surveys are a primary tool through which I intend to acquire and consolidate feedback on best practices for hybrid learning. Other authors (Saunders, 2016; Newcomer et al., 2015) recognized the value of surveys in accumulating qualitative feedback supporting program monitoring and evaluation. Collection of survey feedback from focus groups examining an organizational change initiative is an integral component to the Delphi technique described in Chapter 2. The use of surveys to obtain insights on all considerations related to hybrid learning will prove useful while planning for the adoption of this new instructional model. Through using surveys as an evaluation tool, I, along with task force counterparts, will be able to examine trends in feedback and explore the effectiveness of proposed solutions while working toward plan implementation. This resonates with Wholey's (2015) approach to evaluability assessment, which involves obtaining information from stakeholders; exploring program realities; assessing feasibility; and developing consensus on necessary changes as well as areas of focus for further monitoring and evaluation. Feedback in the do phase through responses from Delphi voting rounds will also enable task force members to keep records of prospective solutions and achieve consensus on the best means through which to move forward: another critical facet of evaluability assessment (Wholey, 2015). These approaches will subsequently inform hybrid learning design.

Collection of post-pilot survey feedback will be equally valuable to gauge the experiences of hybrid learners while checking for, or evaluating, program effectiveness. Through collecting feedback from internal stakeholders during a preliminary pilot, WorkSafeHealth personnel will be able to identify lingering barriers toward optimal hybrid learning experiences

and work toward their correction before offering external pilots to clients. The provision of this feedback to all task force members will support mutual evaluation of the product by this group. I recognize the importance bestowed on collaboration in program evaluation; given my leadership approach and desire for collective action toward change implementation, unless necessary, I do not deem it appropriate to reserve final decisions and subsequent actions to one person (in other words, to me as change agent). Task force members and other relevant WorkSafeHealth personnel will be equipped with the necessary information to address limitations with hybrid learning if they become apparent. Those in various departments who must adjust operations to support the initiative will also be informed of this feedback so that they may work toward enhancement of specific processes and alignment with other organizational systems.

Meetings

Though task force survey feedback is valuable, learning from the findings will only support change if it is reviewed and discussed; therefore, meetings comprise an integral component in both monitoring and evaluating the progress of this initiative. Utilizing a similar approach to that recommended by Agbenyo et al. (2021), meeting facilitation will foster the opportunity to debrief on survey feedback, supporting both progress monitoring and evaluation of achievements. In meetings among task force members, insights on how to proceed with various facets of the hybrid learning initiative can be discussed further, with revotes if the group does not achieve consensus on one approach to be taken on a given theme. While meetings with this working group will comprise a substantial portion of the do phase, other WorkSafeHealth personnel must be involved in meetings to contribute to ongoing monitoring and evaluation. Department-specific meetings will also provide the opportunity to ensure that practices relevant to each organizational system are accounted for in the do phase. If teammates do not

communicate insights and concerns with the connectors (Lewis, 2019) in their respective departments, I believe that my encouragement of these opinions during department meetings will foster a monitoring opportunity to ensure that gaps identified by these critical stakeholders are addressed in subsequent task force meetings. Previously in Chapter 3, I alluded to my personal attendance in department meetings to ensure all voices are heard and feedback is collected throughout this initiative. I will also be able to confirm the importance bestowed on hybrid learning across all departments. My attendance will prove valuable in ensuring I am sufficiently able to monitor and evaluate progress on the hybrid learning initiative not only in the task force's efforts, but in the efforts of each department across the organization.

Successful implementation of a hybrid learning model that addresses the problem of practice will eliminate the need for a task force to oversee this project, but ongoing evaluation toward continuous improvement will also be conducted through department meetings after the termination of this initiative. I anticipate that, when applicable, all-staff meetings will serve as a venue to announce new hybrid courses while providing trainers with the opportunity to give feedback on sessions that they facilitate, illuminating further insights into strengths as well as opportunities to boost the effectiveness of hybrid learning.

Digital Correspondence

Often, there are times when consultant-trainers are unable to attend all-staff or department meetings, which may compromise their abilities to remain informed or provide feedback on hybrid learning approaches. To ensure that all stakeholders are given the opportunity to remain informed and share their insights, departmental and all-staff meeting reports must be complemented with digital correspondence tools, including emails, instant messages, and meeting minutes and recordings that were highlighted in Table 1. Based on past

practices, I can attest to the effectiveness of these tools in maintaining awareness and collecting feedback. This documentation permits review at a consultant-trainer's opportunity, ensuring access for those with scheduling conflicts often stemming from work on priority projects for their respective clients. I am certain that WorkSafeHealth personnel will take the time to review the information presented in these additional tools, especially as hybrid training delivery will affect consultant-trainer calendars and approaches to conducting business.

While consultant-trainers can receive updates through digital correspondence, they are also encouraged to provide feedback through digital tools on existing course materials: the same practices will apply to hybrid learning sessions. Toward the end of the do phase, instructors will be encouraged to provide feedback on hybrid sessions after facilitating an external pilot. Even at the end of the change initiative, signified by the finalization of the first hybrid course, instructor feedback on existing courses will still be required as it is essential in capturing opportunities for ongoing continuous improvement. Instructors will furnish further insights that support the evaluation of this program suite by enumerating strengths and identifying opportunities for further enhancement. On the internal Microsoft Teams platform, WorkSafeHealth personnel utilize Microsoft Excel spreadsheets to post requested updates to training programs that they wish to bring to the attention of the association's instructional designers. One spreadsheet for each existing course is set up; spreadsheets for each hybrid course will be added upon official release of these programs. Through examination of these forms that capture course effectiveness from an instructor's perspective, the program development team will be able to work toward continuous improvement by factoring this information into program updates. As a member of this team, I recognize that I will be involved in further program evaluation for the courses to which I am assigned; at the point where the change initiative draws to a close, however,

evaluation of the fuller hybrid learning suite will better reside with T.W., the department director.

Adjusting the Implementation Plan

While I anticipate that these tools will support hybrid learning development and enhance access to health and safety education, I also recognize their utility in helping identify where approaches must be shifted throughout the four phases of the PDCA model. If, throughout this project, the opportunity to accumulate additional feedback from other external stakeholders, such as the MLITSD or client firms, becomes apparent, these tools will also be utilized to collect insights from these other groups. I do not anticipate the collection of insights from these parties while WorkSafeHealth personnel begin work on hybrid learning for two reasons. First, these parties do not have the tools, resources, or expertise to help WorkSafeHealth personnel determine best practices for hybrid learning, given their operational scopes and the focus they allocate to the services that they offer. In the case of client firms, their feedback has already supported WorkSafeHealth's recognition of the need to shift training service delivery so that mandatory health and safety courses are more readily available for those who have diminished access because of geographic limitations and other considerations highlighted in Chapter 1. Therefore, I believe that WorkSafeHealth personnel are already equipped with sufficient feedback from these external stakeholders to recognize the value in offering hybrid learning as a training model that will address the current learning gaps faced by Ontario's workers.

Surveys, meeting minutes, and digital correspondence are beneficial in that they provide concrete records of discussions that take place throughout the initiative, which is important in evaluability assessment (Wholey, 2015). These records will be critical in monitoring as trends can be examined throughout the process, and ideas that may have been opted against for other

alternatives may prove to be valuable pursuits when evaluating for continuous improvement. Accumulating ongoing feedback with the ability to return to it when assessing hybrid learning delivery for effectiveness will enable WorkSafeHealth stakeholders to generate feasible, reasonable solutions that advance hybrid learning offerings. In addition, these records will support post-implementation evaluation of the initiative. Documented approaches can either be deemed valuable to retain, or considerations not previously recorded can become opportunities for improvement if they become subsequent areas of focus when limitations associated with certain themes become more apparent. When creating additional hybrid courses after identifying areas for improvement in the first program, continued adjustments toward launching effective, engaging hybrid instruction will likely become apparent, resulting in the return to prior course materials for upgrades, albeit subtle ones. At the point of standardization, or institutionalization (Kotter, 2011), I surmise that operational shifts for enhanced hybrid learning opportunities will reside with specific departments, and these groups will be responsible for the respective ongoing evaluation of their own systems. However, as the champion of this initiative, I anticipate that I will continue to be involved to some degree with ongoing evaluation when it is first officially implemented and after appropriate models and accompanying procedures are established. My involvement in the project after this remains to be determined as it is likely that organizational leaders will assume an evaluator role within their respective departments. However, the rapport I have fostered with WorkSafeHealth leadership and other counterparts will enable me to remain informed and potentially share insights based on what will become historical information from participating in the development of hybrid learning throughout the initiative. Other task force members may assume similar roles as well.

I list surveys, meetings, and digital correspondence as the primary tools through which communication, monitoring, and evaluation can take place. However, I also feel compelled to acknowledge the value that additional sidebar dialogue, such as phone calls and face-to-face conversations, can contain in sharing insights. Though these may not be codified in a similar way to how meeting minutes and recordings or emails can be captured, I do believe that this dialogue will inspire further discussions among task force members that will be subsequently documented and will remain available for further review. It would be unfair to exclude the information collected in these additional discourses from further consideration, but I do not anticipate that this would occur, especially given the dialogue-rich culture in which WorkSafeHealth operates.

I have already described how timelines for this initiative are not bound by an urgent need for change, as traditional delivery formats have been utilized since 2010. I believe that fluid dialogue inspired in these three tools is largely sufficient in fostering effective opportunities for monitoring and evaluation, and I recognize their effectiveness given their utility throughout prior initiatives. Though there are other tools that can complement a PDCA process, such as balanced scorecards containing dozens of elaborate performance measures (Marwa & Ali, 2019), the tools listed in this section provide sufficient means to track progress and address gaps when appropriate. Additional paperwork, such as a scorecard, may prove cumbersome when used in addition to surveys, meeting documentation and recordings, and digital correspondence that already provide the evidence needed to identify successes and areas for continuous improvement. If required, additional means through which ongoing monitoring can take place will be explored; however, I would be hesitant to implement measures that do not reflect standard means through which WorkSafeHealth explores organizational change initiatives. In addition, I would not want to beleaguer task force members or other organizational stakeholders with additional

documentation that may be regarded as cumbersome and inevitably diminish desire to proceed with work on the hybrid learning implementation plan. Aligning with the importance I bestow on stakeholder voices, I am confident that thorough scrutiny of the tools proposed in this plan will generate the insights necessary to ensure WorkSafeHealth's hybrid learning programs are implemented and effective.

Next Steps and Future Considerations

Like other authors (Bower et al., 2015; Graham, 2021; Rogers et al., 2003; Zydney et al., 2018), I have identified hybrid learning as an effective and economical means through which equitable access to education can be enhanced. Learners who do not have the same access to training as those residing in areas closer to WorkSafeHealth offices or to consultant-trainer locations can derive tremendous benefit from this solution. The incorporation of hybrid learning into WorkSafeHealth's training suite is meant specifically for the facilitation of courses addressing knowledge-based components, such as supervisory common core training for mining industry firms, that can be disseminated through course work conducted at a desk or workstation. Because WorkSafeHealth is predominantly responsible for providing the knowledge portion of legislated training, with the skills component evaluated by designated personnel at respective client firms (Canadian Safety Group, n.d.), the organization would be able to fulfill a significant number of training requirements in a learning environment that does not require on-site trainer presence. In addition, the interaction with instructors and peers in synchronous environments would not be diminished with hybrid courses facilitated in real-time: a key benefit associated with hybrid learning (Bower et al., 2015; Graham, 2021; Kahn & Hindman, 2021; Rogers et al., 2003; Zydney et al., 2018). Though it is reasonable to assume that some clients may opt to send their employees to face-to-face sessions, health and safety risks associated with extensive travel

would be reduced, and there would be significant cost savings accrued by WorkSafeHealth and client firms. Some courses are accompanied by competency checklists and on-site observations typically conducted by client firm personnel, but the skills component is outside of scope for this initiative. However, it is not uncommon for a client firm to request consultant-trainer assistance with skills-based performance evaluations. A reasonable next step, therefore, would be to examine whether hybridization of these additional components could take place. Upon preliminary consideration, I question whether learning technologies can also be adapted to provide a consultant-trainer with the opportunity to view learners in action at their respective workplaces through digital means.

I will use a train-the-trainer course, where learners receive instruction on developing materials to support their own facilitation of company-based training, as an example. While this three-day knowledge-based session can be taken virtually, a performance component requires a WorkSafeHealth instructor to validate the trainee's effectiveness in transferring learning to others. If a trainee is equipped with a laptop computer, the individual can set up the laptop at a company training venue and facilitate a course with a WorkSafeHealth consultant-trainer as a virtual observer. Ongoing dialogue through a follow-up virtual meeting, and the use of email to send performance evaluation documents to the trainee, can also be easily applied, thereby preventing the need for a consultant-trainer to travel to the worksite for this component.

While this can be applied to numerous courses offered by WorkSafeHealth, I am not advocating for the use of hybrid learning to facilitate skills-based courses, such as those addressing heavy equipment operation. In the case of skills-based components for first aid training, for example, on-site skills camps for the cardiopulmonary resuscitation components are still required (Canadian Red Cross, 2023; Rotich & Elliott, 2019; St. John Ambulance, 2023).

Skills-oriented sessions certainly require the on-site presence of a consultant-trainer to ensure procedures and methods are executed safely by trainees. Though I would welcome the opportunity to explore the use of training simulation equipment to support skills-based courses, this type of training resides out of the scope of this initiative, and it is currently unfeasible from a cost perspective as well as with the current absent knowledge base within the organization to work with this type of training. Hybrid learning, if implemented at WorkSafeHealth, will support the facilitation of a vast majority of the courses offered by consultant-trainers at this time, enhancing access to health and safety training while reducing travel risks and course facilitation costs for trainers and trainees alike.

Chapter 3 Summary

With the identification of hybrid learning as the key solution through which WorkSafeHealth can address inequities with access to health and safety education, I recommend that the organization proceed with the implementation plan highlighted at the beginning of this chapter. In collaboration with other stakeholders, I encourage the application of the communication and monitoring and evaluation plans on which I elaborate throughout the remainder of this chapter as they have proven beneficial in prior change initiatives. Applying the PDCA model to change implementation as well as monitoring and evaluation provides WorkSafeHealth personnel with the opportunity to progress through this change initiative with a linear approach that fosters ongoing review of processes that may require adjustment for continuous improvement. By ensuring that learners from client firms across Ontario have enhanced access to health and safety education, WorkSafeHealth can fulfill its mandate of providing this service and reduce the chance of workplace incidents in Ontario.

Epilogue

I am compelled to highlight the current status of this change project as WorkSafeHealth personnel are already actively involved in its pursuit. To date, I have utilized the approach depicted in the preliminary part of the planning phase to emphasize the need for change and explain how hybrid education can support fulfillment of WorkSafeHealth's mandate. Through digital correspondence, I recruited nine members to join the hybrid learning task force. The group has held three meetings: the first focused on the task force's scope, and the latter two pertained to voting rounds facilitated through the Delphi technique (Beech, 1999; Cone & Unni, 2020; Dalkey & Heimer, 1963; Loo, 2000; Ogbeifun et al., 2017). A follow-up meeting will take place in the coming weeks to address the most recent feedback. Hybrid learning updates have been added as a standard item on the all-staff meeting agenda, and I have also been given the opportunity to provide updates and hear concerns at some department meetings.

Nearly three full months have passed since the establishment of a task force, and I and my counterparts are working through the do stage of the implementation plan without issue. Based on the consensus achieved on hybrid learning themes, we have already partially transitioned to department-specific process development. Task force member attendance has been consistent at these meetings, and discussions on identified themes have been both transparent and productive, aligning with a stakeholder-based, participative-democratic approach to change (Miller & Monge, 1986; Northouse, 2016). I am grateful for the opportunity to collaborate with stakeholders representing all organizational systems while aligning processes to create optimal hybrid learning experiences for WorkSafeHealth trainees. Some initial approaches pertaining to classroom setup and digital infrastructure have already been adjusted to accommodate other considerations, such as fostering collaboration among participants: critical in

a hybrid environment (Bower et al., 2015; Graham, 2021; Kahn & Hindman, 2021; Rogers et al., 2003; Zydney et al., 2018). The learning technology has also been tested during internal meetings and external webinar-style events to ensure that it provides engaging audio-visual experiences.

Though not to the degree that I had initially hoped, additional feedback from WorkSafeHealth stakeholders extraneous to the task force has come to the group's attention: these insights have contributed to deliberations on program design considerations. Though I have been involved as a guest in department-specific meetings during 'hybrid learning spotlights' and have been able to answer employee questions about task force progress and department-specific implications, I question whether similar encouragement of discussions regarding this initiative is employed by task force counterparts. Some questions that I encounter can easily be addressed by these connectors (Lewis, 2019), but there is an apparent pause in the meetings before I inevitably provide an answer. Ultimately, I question whether my presence at these meetings stunts the desire for task force members to respond; however, I am concerned that hybrid learning would diminish in importance if I excused myself from this facet of the communication plan. Despite efforts in maintaining a participative-democratic leadership approach, I wonder about whether the structural functional (Capper, 2019) nature of the organization affects the sources and permeators of discourse more than I had witnessed during prior initiatives.

How does this aspect of communication affect successful plan implementation, and what other suggestions do I have for hybrid learning adoption at this stage of the change initiative? Throughout this plan, I have emphasized the importance of collaborative approaches to change in which stakeholders, each with their respective expertise and insights, contribute and effect change that works. Communication, therefore, is one of the most critical pieces that fosters

successful change: it ensures alignment across organizational systems within a set timeframe; it supports the identification of approaches that support the initiative, as well as corresponding necessary adjustments; it stimulates buy-in and encourages the importance of a transition through expressions of urgency (Kotter, 2011); and it illuminates the importance of each stakeholder's actions in effecting change, thereby easing their apprehensions and contributing to their empowerment (Goleman et al., 2013; Hilton et al., 2021; Jasper, 2018) and overall job satisfaction and motivation (John, 2020; Kim, 2002). In reviewing the impact that I may inadvertently have on communication, I must re-examine my role and encourage organic discourse that does not rely on my contributions. Candid discussions may take place among task force members, but I must strive for a comparable collaborative atmosphere among all WorkSafeHealth parties as ongoing work will rely extensively on every person's contributions. Fostering a climate of support toward the adoption of hybrid learning is paramount in ensuring successful implementation of this organizational improvement plan.

References

- Alea, L. A. & Fabrea, M. F. (2020). Teachers' COVID-19 awareness, distance learning education experiences and perceptions towards institutional readiness and challenges. *International Journal of Learning, Teaching and Educational Research*, 19(6), 127-144. <https://doi.org/10.26803/ijlter.19.6.8>
- Adiguzel, Z. (2019). Relationships among leader effectiveness, learning orientation, effective communication, team creativity and service innovation in the service sector. *Business and Economics Research Journal*, 10(1), 131-148. <https://doi-org.proxy1.lib.uwo.ca/10.20409/berj.2019.159>
- Agbenyo, F., Nyilyari, W., & Akanbang, B. A. A. (2021). Stakeholder perspectives on participatory monitoring and evaluation in educational projects in upper west region, Ghana. *Journal of Planning and Land Management*, 2(1), 50-64. <https://doi.org/10.36005/jplm.v2i1.34>
- Amick, B. C., Hogg-Johnson, S., Latour-Villamil, D., & Saunders, R. (2015). Protecting construction worker health and safety in Ontario, Canada. *American College of Occupational and Environmental Medicine*, 57(12), 1337-1342. <https://doi.org/10.1097/JOM.0000000000000562>
- Association of Workers' Compensation Boards of Canada. (2021). *National Work Injury, Disease and Fatality Statistics*. <https://awcbc.org/wp-content/uploads/2023/02/National-Work-Injury-Disease-and-Fatality-Statistics-2019-2021.pdf>
- Azar, A. S., & Tan, N. H. I. (2023). Text presentation or video: Malaysian university students' preferences with synchronous and asynchronous learning. *Education and Information Technologies*, 1-22. <https://doi.org/10.1007/s10639-023-11796-4>

- Bakari, H., Hunjra, A. I., & Niazi, G. S. K. (2017). How does authentic leadership influence planned organizational change? The role of employees' perceptions: Integration of theory of planned behavior and Lewin's three step model. *Journal of Change Management*, 17(2), 155-187. <https://doi.org/10.1080/14697017.2017.1299370>
- Bangert, K., Bates, J., Beck, S., Bishop, Z., Di Benedetti, M., Fullwood, J., Funnell, A., Garrard, A., Hayes, S., Howard, T., Johnson, C., Jones, M., Lazari, P., Mukherjee, J., Omar, C., Taylor, B., Thorley, R., Williams, G., & Woolley, R. (2020). Remote practicals in the time of coronavirus, a multidisciplinary approach. *International Journal of Mechanical Engineering Education*, 1. <https://doi-org.proxy1.lib.uwo.ca/10.1177/0306419020958100>
- Barling, J. (2014). *The science of leadership*. Oxford University Press.
- Bartunek, J. M., & Woodman, R. W. (2015). Beyond Lewin: Toward a temporal approximation of organization development and change. *Annual Review of Organizational Psychology and Organizational Behaviour*, 2(1), 157-182. <https://doi.org/10.1146/annurev-orgpsych-032414-111353>
- Baxter, G., & Hainey, T. (2023). Remote learning in the context of COVID-19: Reviewing the effectiveness of synchronous online delivery. *Journal of Research in Innovative Teaching & Learning*, 16(1), 67-81. <https://doi.org/10.1108/JRIT-12-2021-0086>
- Beech, B. (1999). Go the extra mile – use the Delphi technique. *Journal of Nursing Management*, 7, 281-288. <https://doi.org/10.1046/j.1365-2834.1999.00125.x>
- Berry, S. (2019). Professional development for online faculty: Instructors' perspectives on cultivating technical, pedagogical and content knowledge in a distance program. *Journal of Computing in Higher Education*, 31, 121-136. <https://doi.org/10.1007/s12528-018-9194-0>

- Bjursell, C., & Engström, A. (2019). A Lewinian approach to managing barriers to university-industry collaboration. *Higher Education Policy*, 32, 129-148.
<https://doi.org/10.1057/s41307-017-0074-4>
- Blankenberger, B., & Williams, A. M. (2020). COVID and the impact on higher education: The essential role of integrity and accountability. *Administrative Theory & Praxis*, 42(3), 404–423. <https://doi-org.proxy1.lib.uwo.ca/10.1080/10841806.2020.1771907>
- Bower, M., Dalgarno, B., Kennedy, G. E., Lee, M. J. W., & Kenney, J. (2015). *Design and implementation factors in blended synchronous learning environments: Outcomes from a cross-case analysis*. *Computers & Education*, 86, 1-17.
<http://dx.doi.org/10.1016/j.compedu.2015.03.006>
- Braeckman, L., Verbrugge, M., Janssens, H., Varpraet, R., & Cobbaut, L. (2017). Awareness, knowledge, and practices regarding occupational hazards among medical students. *American College of Occupational and Environmental Medicine*, 59(4), e41-e45.
<https://doi.org/10.1097/JOM.0000000000000972>
- Burnes, B. (2004). Kurt Lewin and the planned approach to change: A re-appraisal. *Journal of Management, Studies*, 41(6), 977-1002. <https://doi-org.proxy1.lib.uwo.ca/10.1111/j.1467-6486.2004.00463.x>
- Burnes, B. (2020). The origins of Lewin’s three-step model of change. *The Journal of Applied Behavioral Science*, 56(1), 32-59. <https://doi.org/10.1177/0021886319892685>
- Burnes, B., & Cooke, B. (2013). Kurt Lewin’s field theory: A review and re-evaluation. *International Journal of Management Reviews*, 15, 408-425.
<https://doi.org/10.1111/j.1468-2370.2012.00348.x>

- Burnes, B., Hughes, M. & By, R. T. (2018). Reimagining organisational change leadership. *Leadership, 14*(2), 141-158.
- Canadian Red Cross. (2023). *Standard first aid & CPR*. <https://www.redcross.ca/training-and-certification/course-descriptions/first-aid-at-home-courses/standard-first-aid-cpr>
- Canadian Safety Group. (n.d.) *Surface miner common core program (770210)*.
<https://www.canadiansafetygroup.com/courses/category/new-worker-safety-basics/course/surface-miner-common-core-program-770210>
- Capper, C. A. (2019). *Organizational theory for equity and diversity: Leading integrated, socially just education*. Routledge.
- Carver, D. L., & Kosloski Jr., M. F. (2015). Analysis of Student Perceptions of the Psychosocial Learning Environment in Online and Face-To-Face Career and Technical Education Courses. *Quarterly Review of Distance Education, 16*(4), 7–21.
- Coffeng, T., van Steenbergen, E. F., de Vries, F., Steffens, N. K., & Ellemers, N. (2021). Reflective and decisive supervision: The role of participative leadership and team climate in joint decision-making. *Regulation & Governance*. <https://doi.org/10.1111/rego.12449>
- Cone, C., & Unni, E. (2020). Achieving consensus using a modified Delphi technique embedded in Lewin's change management model designed to improve faculty satisfaction in a pharmacy school. *Research in Social and Administrative Pharmacy, 16*, 1711-1717.
<https://doi.org/10.1016/j.sapharm.2020.02.007>
- Conrad, K. L., & LeMay, L. E. (2020). Lessons from the field: Leading institutional change from the middle. *New Directions for Community Colleges, 191*, 107-116. <https://doi-org.proxy1.lib.uwo.ca/10.1002/cc.20415>
- Cordell, A., & Thompson, I. (2019). *The procurement models handbook* (3rd ed.). Routledge.

- Cuhls, K. (n.d.) *Delphi method*. 93-113. https://faculty.ontariotechu.ca/kay/gradfiles/MEd_Qualitative_WebPage/DelphiMethod.pdf
- Cummings, S., Bridgman, T., & Brown, K. G. (2015). Unfreezing change as three steps: Rethinking Kurt Lewin's legacy for change management. *Human relations*, 69(1), 33-60. <https://doi.org/10.1177/0018726715577707>
- D'Souza, M., Fry, K., Koyanagi, L., & Shepherd, A. (2020). COVID-19 impacts at a small mid-Atlantic liberal-arts college with implications for STEM education. *Journal of Education and e-Learning Research*, 7(4), 407-420. <https://doi.org/10.20448/journal.509.2020.74.407.420>
- Dahl, Ø., Rundmo, T., & Olsen, E. (2022). The impact of business leaders' formal health and safety training on the establishment of robust occupational health and safety and health management systems: Three studies based on data from labour inspections. *International Journal of Environmental Research and Public Health*, 19, 1269. <https://doi.org/10.3390/ijerph19031269>
- Dahlman, S. & Heide, M. (2020). *Strategic internal communication: A practitioner's guide to implementing cutting-edge methods for improved workplace culture*. Routledge.
- Dalkey, N., & Helmer, O. (1963). An experimental application of the Delphi method to the use of experts. *Management Science*, 9(3), 458-467. <https://www.jstor.org/stable/2627117>
- Davis, C., Greenaway, R., Moore, M., & Cooper, L. (2019). Online Teaching in Social Work Education: Understanding the Challenges. *Australian Social Work*, 72(1), 34-46. <https://doi-org.proxy1.lib.uwo.ca/10.1080/0312407X.2018.1524918>

DeBell, J. (2019). Democratic leadership. *The Dental Assistant*, 88(2), 6-7.

<https://link.gale.com/apps/doc/A589127431/AONE?u=lond95336&sid=bookmark-AONE&xid=eb0a62ad>

Deming, W. E. (2018). *The new economics for industry, government, education* (3rd ed.). MIT Press.

Deming Institute. (2023). *Enriching society through the Deming philosophy*.

<https://deming.org/explore/pdsa/>

Dyment, J., & Downing, J. (2018). “There was nowhere to hide...”: the surprising discovery of how weekly web conferences facilitated engagement for online initial teacher education students. *Asia-Pacific Journal of Teacher Education*, 46(4), 399–418. <https://doi-org.proxy1.lib.uwo.ca/10.1080/1359866X.2018.1444140>

Ejimabo, N. O. (2015). The influence of decision making in organizational leadership and management activities. *Entrepreneurship & Organization Management*, 4(2), 1-13. <http://dx.doi.org/10.4172/2169-026X.1000138>

Elzainy, A., El Sadik, A., & Al Abdulmonem, W. (2020). Experience of e-learning and online assessment during the COVID-19 pandemic at the College of Medicine, Qassim University. *Journal of Talbah University Medical Services*, 15(6), 456-462. <https://doi.org/10.1016/j.jtummed.2020.09.005>

Falkheimer, J., & Heide, M. (2018). *Strategic communication: An introduction*. Routledge.

Ferguson, E. D. (2011). What Adlerians consider important for communication and decision-making in the workplace: mutual respect and democratic leadership style. *Journal of Individual Psychology*, 67(4), 432–437.

- Frick, N. R. J., Möllmann, H. L., Mirbabaie, M., & Stieglitz, S. (2021). Driving digital transformation during a pandemic: Case study of virtual collaboration in a German hospital. *JMIR Medical Informatics*, 9(2), 1-13. <https://doi.org/10.2196/25183>
- Goleman, D., Boyatzis, R., & McKee, A. (2013). *Primal leadership: Unleashing the power of emotional intelligence*. Harvard Business Review Press.
- Graham, C. R. (2021). Exploring definitions, models, frameworks, and theory for blended learning research. In A. G. Picciano, C. D. Dziuban, C. R. Graham, & P. D. Moskal (Eds.) *Blended learning* (Vol. 2, pp. 10-29). Routledge.
<http://dx.doi.org/10.4324/9781003037736-3>
- Gregory, R. L., Rockinson-Szapkiw, A. J., Cook, V. S. (2020). Community college faculty perceptions of the Quality Matters™ rubric. *Online Learning*, 24(2), 128-141.
<https://doi.org/10.24059/olj.v24i2.2052>
- Guo, S. (2020). Synchronous versus asynchronous online teaching of physics during the COVID-19 pandemic. *Physics Education*, 55. <https://doi.org/10.1088/1361-6552/aba1c5>
- Hargreaves, C., Clarke, A. P., & Lester, K. R. (2022). Microsoft Teams and team performance in the COVID-19 pandemic within an NHS trust community service in North-West England. *Team Performance Management: An International Journal*, 28(1/2), 79-94.
<https://doi.org/10.1108/TPM-11-2021-0082>
- Hearst Ontario Canada. (n.d.) *Business directory for goods and services*.
<https://www.hearst.ca/en/business/business-directory-for-good-and-services-2/>
- Hiep, H. Y., & Hien, N. N. (2023). Safety leadership, Covid-19 risk perception, and safety behavior: The moderator role of work pressure. *International Journal of Safety and Security Engineering*, 13(2), 255-266. <https://doi.org/10.18280/ijssse.130208>

- Hilton, S. K., Arkorful, H., & Martins, A. (2021). Democratic leadership and organizational performance: the moderating effect of contingent reward: MRN. *Management Research Review*, 44(7), 1042-1058. <https://doi-org.proxy1.lib.uwo.ca/10.1108/MRR-04-2020-0237>
- Hopkin, P. (2013). *Risk management*. Kogan Page Ltd.
- Howell, J. P., & Wanasika, I. (2018). *Snapshots of great leadership* (2nd ed.). Routledge.
- Hughes, G. (2010). Identity and belonging in social learning groups: the importance of distinguishing social, operational and knowledge-related identity congruence. *British Educational Research Journal*, 36(1), 47–63. <https://doi-org.proxy1.lib.uwo.ca/10.1080/01411920902834167>
- Hussain, S. T., Lei, S., Akram, T., Haider, M. J., Hussain, S. H., & Ali, M. (2018). Kurt Lewin's change model: A critical review of the role of leadership and employee involvement in organizational change. *Journal of Innovation & Knowledge*, 3(3), 123–127. <https://doi.org/10.1016/j.jik.2016.07.002>
- Hamdi, T., & Abu Qudais, M. (2018). Optimising the blended learning environment: the Arab Open University experience. *Open Learning*, 33(1), 46–62. <https://doi-org.proxy1.lib.uwo.ca/10.1080/02680513.2017.1414587>
- Hu, R. (2020). Reinventing community in COVID-19: A case in Canberra, Australia. *Socio-Ecological Practice Research*, 2, 237-241. <https://doi.org/10.1007/s42532-020-00055-2>
- Hustus, C. L., & Sarno Owens, J. (2018). Assessing readiness for change among school professionals and its relationship with adoption and reported implementation of mental health initiatives. *Child & Youth Care Forum*, 47(6), 829–844. <https://doi-org.proxy1.lib.uwo.ca/10.1007/s10566-018-9463-0>

- Jasper, L. (2018). Building an adaptive leadership style. *Strategic Finance*, 99(9), 54-61.
<https://www.proquest.com/scholarly-journals/building-adaptive-leadership-style/docview/2062946828/se-2?accountid=12005>
- John, K. (2020). Adlerian theory and practice wisdom promote democratic leadership and organizational health. *Journal of Individual Psychology*, 76(1), 84–98. <https://doi-org.proxy1.lib.uwo.ca/10.1353/jip.2020.0020>
- Johnson, N., Velestianos, G., Belikov, O., & VanLeeuwen, C. (2022). Faculty perceptions of online education and technology use over time: A secondary analysis of the annual survey of faculty attitudes about technology from 2013 to 2019. *Online Learning*, 26(3), 293-310. <https://doi.org/10.24059/olj.v26i3.2824>
- Kahn, C., & Hindman, L. L. (2021). Highly effective blended teaching practices. In A. G. Picciano, C. D. Dziuban, C. R. Graham, & P. D. Moskal (Eds.) *Blended learning* (Vol. 2, pp. 10-29). Routledge. <http://dx.doi.org/10.4324/9781003037736-9>
- Kendrick, T. (2010). *Project management tool kit: 100 tips and techniques for getting the job done right*. AMACOM.
- Kim, S. (2002). Participative management and job Satisfaction: lessons for management leadership. *Public Administration Review*, 62(2), 231–241. <https://doi.org/10.1111/0033-3352.00173>
- Kotter, J. P. (2011). Leading change: Why transformation efforts fail. In J. P. Kotter, W. C. Kim, & R. A. Mauborgne (Eds.), *HBR's 10 must reads on change management* (1st ed., pp. 1-16). Harvard Business Review Press.
- Kuenkel, P., Kuhn, E., Stucker, D., & Williamson, D. F. (2021). *Leading transformative change collectively: A practitioner guide to realizing the SDGs*. Routledge.

- Lai, B., Dwivedi, Y. K., & Haag, M. (2021). Working from home during Covid-19: Doing and managing technology-enabled social interaction with colleagues at a distance. *Information Systems Frontiers*. <https://doi.org/10.1007/s10796-021-10182-0>
- Lavis, J. N., Robertson, D., Woodside, J. M., McLeod, C. B., & Ableson, J. (2003). How can research organizations more effectively transfer research knowledge to decision makers? *The Milbank Quarterly*, 81(2), 221-248. <https://doi.org/10.1111/1468-0009.t01-1-00052>
- Lewin, K. (1951). *Field theory in social science: Selected theoretical papers*. Harper & Row.
- Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created "social climates." *The Journal of Social Psychology*, 10(2), 271-299. https://tu-dresden.de/mn/psychologie/ipep/lehrlern/ressourcen/dateien/lehre/lehramt/lehrveranstaltungen/Lehrer_Schueler_Interaktion_SS_2011/Lewin_1939_original.pdf?lang=en
- Lewis, L. (2019). Organizational change: *Creating change through strategic communication* (2nd ed.). WILEY Blackwell.
- Likert, R. (1979). From production- and employee-centeredness to systems 1-4. *Journal of Management*, 5(2), 147-156. <https://doi.org/10.1177/014920637900500205>
- Likert, R. (1981). System 4: A resource for improving public administration. *Public Administration Review*, 41(6), 674-678. <https://doi.org/10.2307/975744>
- Loo, R. (2000) Forecasting the future: The Delphi method in organizational consulting. In R. Golembiewski (Ed.), *Handbook of Organizational Consultation* (2nd ed., pp. 671-676). Taylor & Francis Group.
- Lukenchuk, A. (2016). Themes at the intersections of theory and practice in online and blended education. *Distance Education*, 37(1), 130-136. <https://doi-org.proxy1.lib.uwo.ca/10.1080/01587919.2016.1158771>

- Manuele, F. A. (2014). *Advanced safety management: Focusing on Z10 and serious injury prevention* (2nd ed.). John Wiley & Sons.
- Marwa, R., & Ali, M. (2019). Balanced scorecard development over the last 26 years. *IOSR Journal of Business and Management*, 21(1), 13-16.
- McGee, P., Windes, D., & Torres, M. (2017). Experienced online instructors: Beliefs and preferred supports regarding online teaching. *Journal of Computing in Higher Education*, 29, 331-352. <https://doi.org/10.1007/s12528-017-9140-6>
- Memon, F. A., Shah, S., & Khoso, I. U. (2021). Improving employee's engagement in change: Reassessing Kurt Lewin's model. *City University Research Journal*, 11(1), 154-164. <https://www.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com/scholarly-journals/improving-employees-engagement-change-reassessing/docview/2542758465/se-2>
- Miller, K. I., & Monge, P. R. (1986). Participation, satisfaction, and productivity: A meta-analytic review. *Academy of Management Journal*, 29(4), 727-753. <https://doi-org.proxy1.lib.uwo.ca/10.2307/255942>
- Ministry of Labour, Immigration, Training and Skills Development. (2018). *New prevention organization*. <https://www.ontario.ca/document/expert-advisory-panel-occupational-health-and-safety/new-prevention-organization>
- Ministry of Labour, Immigration, Training and Skills Development. (2019). *Chief Prevention Officer's occupational health and safety management system accreditation standard*. <https://www.ontario.ca/page/chief-prevention-officers-occupational-health-and-safety-management-system-accreditation-standard>

- Ministry of Labour, Immigration, Training and Skills Development. (2021). *Visibility hazards for vehicles and mobile equipment in industrial workplaces*. <https://www.ontario.ca/page/visibility-hazards-vehicles-and-mobile-equipment-industrial-workplaces>
- Ministry of Labour, Immigration, Training and Skills Development. (2021b). *Workplace exposure and illness*. <https://www.ontario.ca/page/workplace-exposure-and-illnesses>
- Ministry of Labour, Immigration, Training and Skills Development. (2021c). *Chief Prevention Officer's occupational health and safety management system accreditation standard*. <https://www.ontario.ca/page/chief-prevention-officers-occupational-health-and-safety-management-system-accreditation-standard>
- Ministry of Labour, Immigration, Training and Skills Development. (2022). *Training, skills and labour supply issues*. <https://www.ontario.ca/document/final-report-mining-health-safety-and-prevention-review/training-skills-and-labour-supply>
- Newcomer, N. E., Hatry, H. P., & Wholey, J. S. (2015). Planning and designing useful evaluations. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey (Eds.) *Handbook of practical program evaluation* (4th ed., pp. 7-35). Jossey-Bass & Pfeiffer Imprints, Wiley. <https://doi-org.proxy1.lib.uwo.ca/10.1002/9781119171386.ch1>
- Northouse, P. G. (2016). *Leadership theory and practice* (7th ed.). Sage.
- O' Shea, S., Stone, C., & Delahunty, J. (2015). "I 'feel' like I am at university even though I am online." Exploring how students narrate their engagement with higher education institutions in an online learning environment. *Distance Education*, 36(1), 41–58. <https://doi-org.proxy1.lib.uwo.ca/10.1080/01587919.2015.1019970>
- Occupational Safety Group. (2023). *Working at Heights and Safety Laws in Ontario*. <https://osg.ca/working-at-heights-safety-and-laws-in-ontario/>

- Occupational Safety Group. (2023b). *Top 10 most dangerous occupations in Ontario*.
<https://osg.ca/top-10-most-dangerous-occupations-in-ontario/>
- Office of the Auditor General of Ontario. (2019). *Section 3.07: Health and safety in the workplace*. https://www.auditor.on.ca/en/content/annualreports/arreports/en19/v1_307en19.pdf
- Ogbeifun, E., Mbohwa, C., & Pretorius, J-H. C. (2017). Achieving consensus devoid of complicity: Adopting the Delphi technique. *International Journal of Productivity and Performance Management*, 66(6), 766-779. <https://doi.org/10.1108/IJPPM-08-2015-0112>
- Oxford English Dictionary. (2022). *Stakeholder*, n. <https://www-oed-com.proxy1.lib.uwo.ca/view/Entry/246856?redirectedFrom=stakeholder#eid>
- Park, J. Y. (2011). Design Education Online: Learning Delivery and Evaluation. *International Journal of Art & Design Education*, 30(2), 176–187. <https://doi-org.proxy1.lib.uwo.ca/10.1111/j.1476-8070.2011.01689.x>
- Phirangee, K., & Malec, A. (2017). Othering in online learning: an examination of social presence, identity, and sense of community. *Distance Education*, 38(2), 160–172.
<https://doi-org.proxy1.lib.uwo.ca/10.1080/01587919.2017.1322457>
- Rogers, P. C., Graham, C. R., Rasmussen, R., Campbell, J. O., & Ure, D. M. (2003). Case 2: Blending face-to-face and distance learners in a synchronous class: Instructor and learner experiences. *Quarterly Review of Distance Education*, 4(3), 245-51.
<https://www.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com/scholarly-journals/case-2-blending-face-distance-learners/docview/62169449/se-2?accountid=15115>

- Rolfe, K. (2022). *Labour shortage threatens to put mining industry on shaky ground*. Mining.com. <https://www.mining.com/labour-shortage-threatens-to-put-mining-industry-on-shaky-ground/>
- Rotich, J. P., & Elliott, G. (2019). Teaching first aid, CPR, and AED using blended learning in academic settings. In J. Keengwe (Ed.) *Handbook of research on blended learning pedagogies and professional development in higher education* (pp. 325-339). IGI Global. <https://doi-org.proxy1.lib.uwo.ca/10.4018/978-1-5225-5557-5.ch018>
- Saunders, R. P. (2016). *Implementation monitoring and process evaluation*. Sage.
- Sekayi, D., & Kennedy, A. (2017). Qualitative Delphi method: A four round process with a worked example. *The Qualitative Report*, 22(10), 2755-2763. <https://doi.org/10.46743/2160-3715/2017.2974>
- Shreaves, D. L., Ching, Y., Uribe-Florez, L., & Trespalacios, J. (2020). Faculty perceptions of online teaching at a midsized liberal arts university. *Online Learning*, 24(3), 106-127. <https://doi.org/10.24059/olj.v24i3.2199>
- St. John Ambulance. (2023). *Standard first aid CPR-C & AED (CSA intermediate)*. <https://sja.ca/en/first-aid-training/standard-first-aid-cpr-c-aed?>
- Statistics Canada. (2021). Forest sector employment (Ontario). *Statistical data*. <https://cfs.nrcan.gc.ca/statsprofile/employment/ON>
- Swanson, D. J., & Creed, A. S. (2014). Sharpening the focus of force field analysis. *Journal of Change Management*, 14(1), 28-47. <https://doi.org/10.1080/14697017.2013.788052>

- Tobin, E., & Hieker, C. (2021). What the EdTech Experience in Refugee Camps Can Teach Us in Times of School Closure. Blended Learning, Modular and Mobile Programs Are Key to Keeping Disadvantaged Learners in Education. *Challenges* (20781547), 12(2), 19. <https://doi-org.proxy1.lib.uwo.ca/10.3390/challe12020019>
- Van Nieuwenhuysse, K. (2020). Synchronous interactive live lectures versus asynchronous individual online modules. A comparative analysis of students' perceptions and performances. *Yesterday and Today*, 24. <https://doi.org/10.17159/2223-0386/2020/n24a4>
- Vauhkonen, O. (2020). *Implementation of Microsoft Teams in Finland* [Master's thesis, Åbo Akademi University]. https://www.doria.fi/bitstream/handle/10024/177797/vauhkonen_otto.pdf?sequence=2
- Vroom, V. H., & Jago, A. G. (2007). The role of the situation in leadership. *American Psychologist*, 62(1), 17-24. <https://doi.org/10.1037/0003-066X.62.1.17>
- Vu, T-V., Vo-Thanh, T., Nguyen, N. P., Nguyen, D. V., & Chi, H. (2022). The COVID-19 pandemic: Workplace safety management practices, job insecurity, and employees' organizational citizenship behavior. *Safety Science*, 145, 1-11. <https://doi.org/10.1016/j.ssci.2021.105527>
- Walker, S., & Creanor, L. (2009). The STIN in the Tale: A Socio-technical Interaction Perspective on Networked Learning. *Journal of Educational Technology & Society*, 12(4), 305–316.
- Wang, C. (2010). *Managerial decision making and leadership: The essential pocket strategy book*. John Wiley & Sons Asia.
- Warner, A. G. (2010). *Strategic analysis and choice: a structured approach*. Business Expert Press.

- Wholey, J. S. (2015). Exploratory evaluation. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey (Eds.) *Handbook of practical program evaluation* (4th ed., pp. 88-107). Jossey-Bass & Pfeiffer Imprints, Wiley. <https://doi-org.proxy1.lib.uwo.ca/10.1002/9781119171386.ch4>
- Williams, A. (2020). Plan-do-check-act: Integrating quality into safety management. *PSJ Professional Safety*, 65(2), 18-19.
- Wingo, N. P., Ivankova, N. V., & Moss, J. A. (2017). Faculty perceptions about teaching online: Exploring the literature using the technology acceptance model as an organizing framework. *Online Learning*, 21(1), 15-35. <https://doi.org/10.24059/olj.v21i1.761>
- Wogalter, M. S. (2019). Hazard analysis and hazard-control hierarchy. In M. S. Wogalter (Ed.), *Forensic Human Factors and Ergonomics: Case Studies and Analyses* (pp. 17-32). Taylor & Francis.
- Workplace Safety and Insurance Board. (2019). *Health and safety excellence program: Guidelines for program members*. https://www.wsib.ca/sites/default/files/2019-10/program_guidelines.pdf
- Workplace Safety and Insurance Board. (2020). *Health and safety excellence program member guidelines*. https://healthandsafety.wsib.ca/sites/default/files/2020-11/HSEp%20-%20Member%20guidelines%20%28September%202020%29_2.pdf
- Workplace Safety and Insurance Board. (2021). *Health and safety excellence program: Sample topic evidence stories*. https://healthandsafety.wsib.ca/sites/default/files/2021-10/Sample%20Evidence%20Stories%20for%20HSEp%20topics_Oct122021_FINAL.pdf
- Workplace Safety and Insurance Board. (2022). *Rate group to class mapping*. <https://www.wsib.ca/en/rate-group-class-mapping>

Workplace Safety and Insurance Board. (2023). *Fatality claims – Schedule 1 and 2.*

https://safetycheck.onlineservices.wsib.on.ca/safetycheck/explore/provincial/SH_12/fatality?lang=en

Workplace Safety and Insurance Board. (2023b). *Injury characteristics – Schedule 1 and 2.*

https://safetycheck.onlineservices.wsib.on.ca/safetycheck/explore/provincial/SH_12/injurycharacteristics?lang=en

Workplace Safety North. (2023). *Top 10 Health and Safety Risks in Underground Mines.*

<https://www.workplacesafetynorth.ca/sites/default/files/resources/Mining-Poster-Top-10-risks-underground-mines-WSN-2023-05-18.pdf>

Workplace Safety North. (n.d.) *New and young workers.*

<https://www.workplacesafetynorth.ca/resources/new-and-young-workers>

Zentek. (n.d.). *Albany graphite deposit.* <https://www.zentek.com/investors/albany-graphite-deposit>

Zins, J. E., & Illback, R. J. (1995). Consulting to facilitate planned organizational change in schools. *Journal of Educational and Psychological Consultation*, 17(2/3), 109-117.

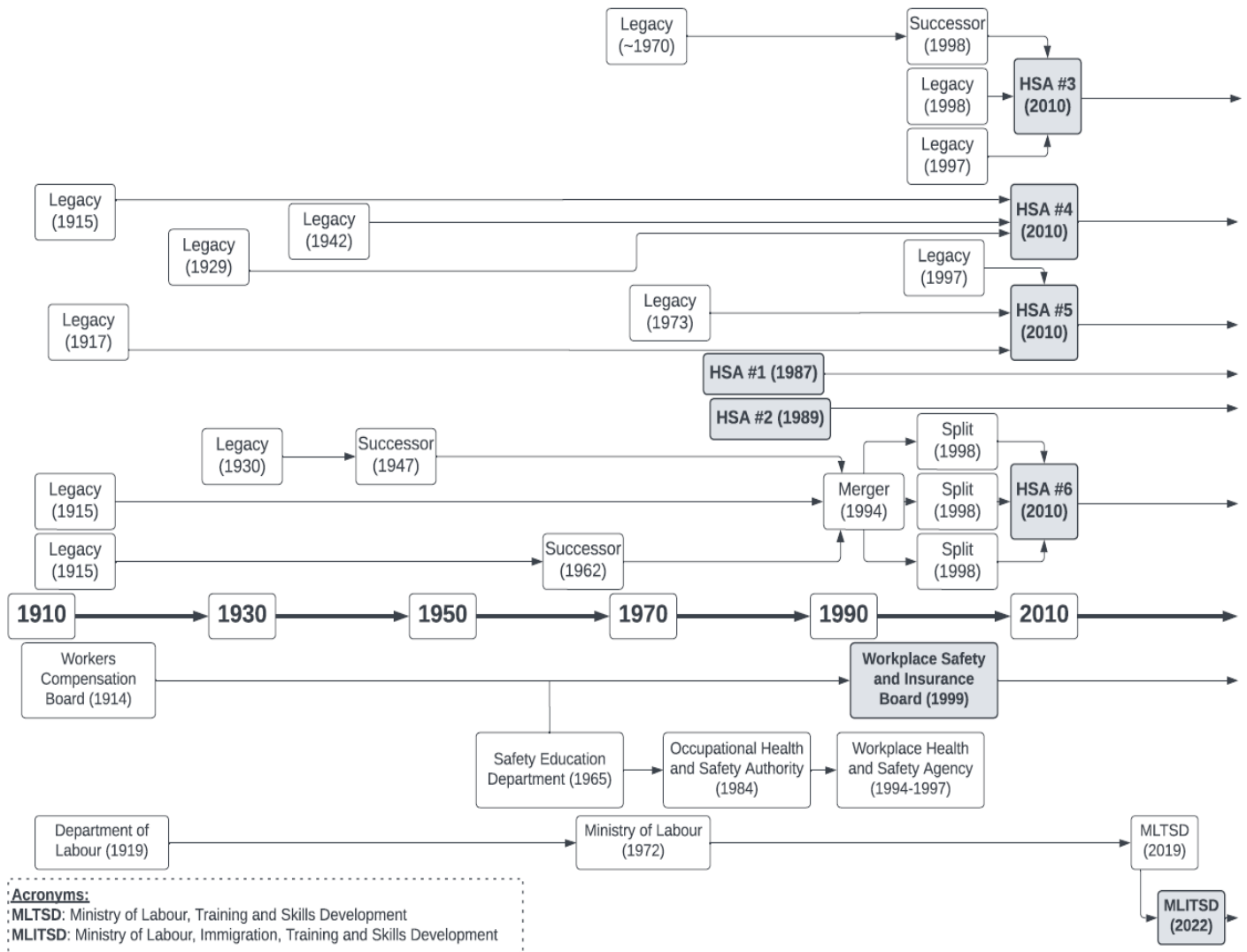
<https://doi-org.proxy1.lib.uwo.ca/10.1080/10474410701413046>

Zydney, J. M., McKimmy, P., Lindberg, R., & Schmidt, M. (2018). Here or there instruction:

Lessons learned in implementing innovative approaches to blended synchronous learning.

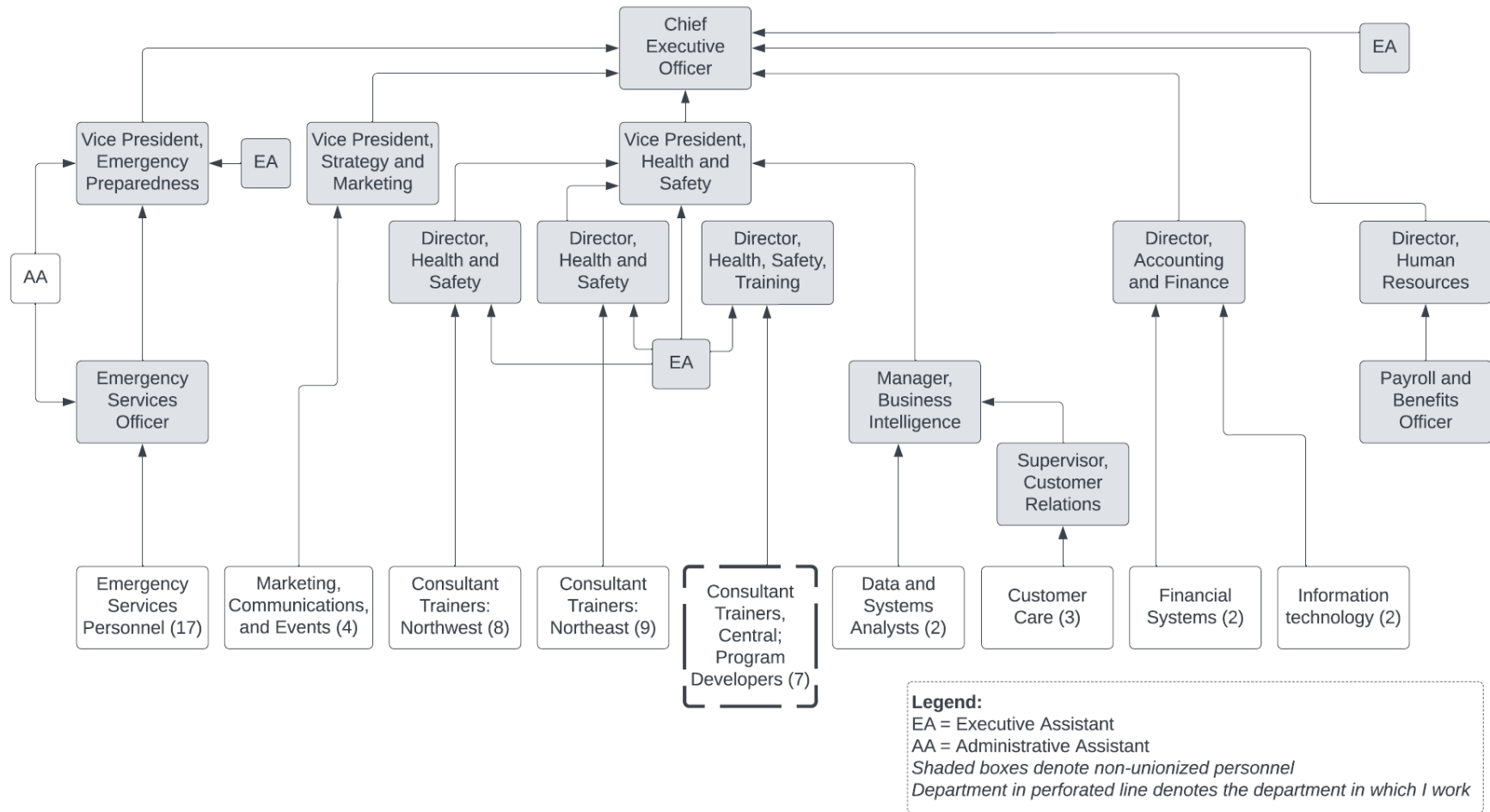
TechTrends, 63, 123-132. <https://doi.org/10.1007/s11528-018-0344-z>

Appendix A: Ontario's Prevention System, 1914-2022



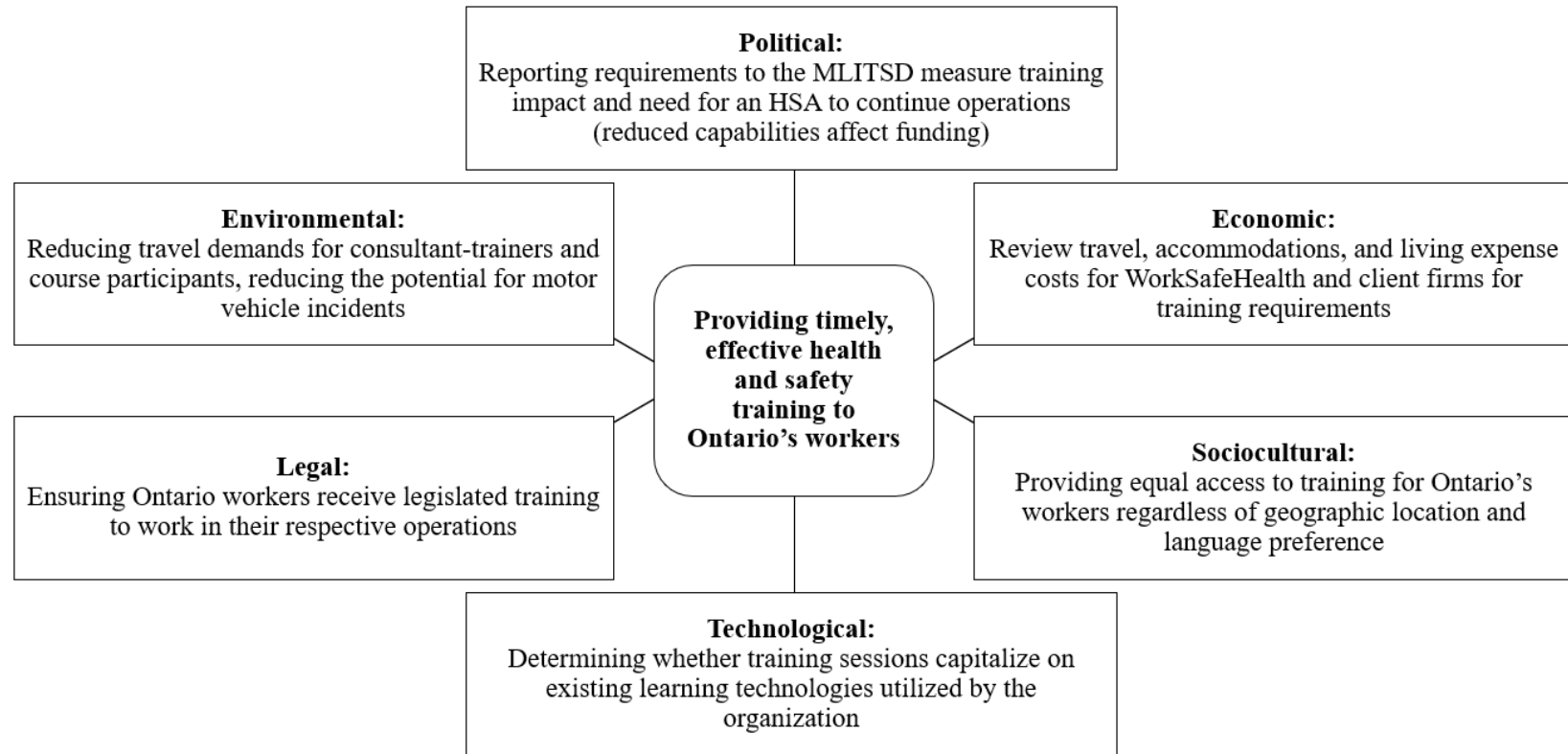
Note. Organizations within the Prevention System that are currently in operation are denoted in boxes with bolded text with shaded backgrounds; WorkSafeHealth is HSA #6. Governance bodies are located under the timeline, while the six HSAs are described above the timeline. Additional groups, such as the Ontario Labour Relations Board, sometimes address matters pertaining to occupational health and safety; however, they operate separately from the Prevention System, as their focus is predominantly on employment standards.

Appendix B: WorkSafeHealth Organizational Chart



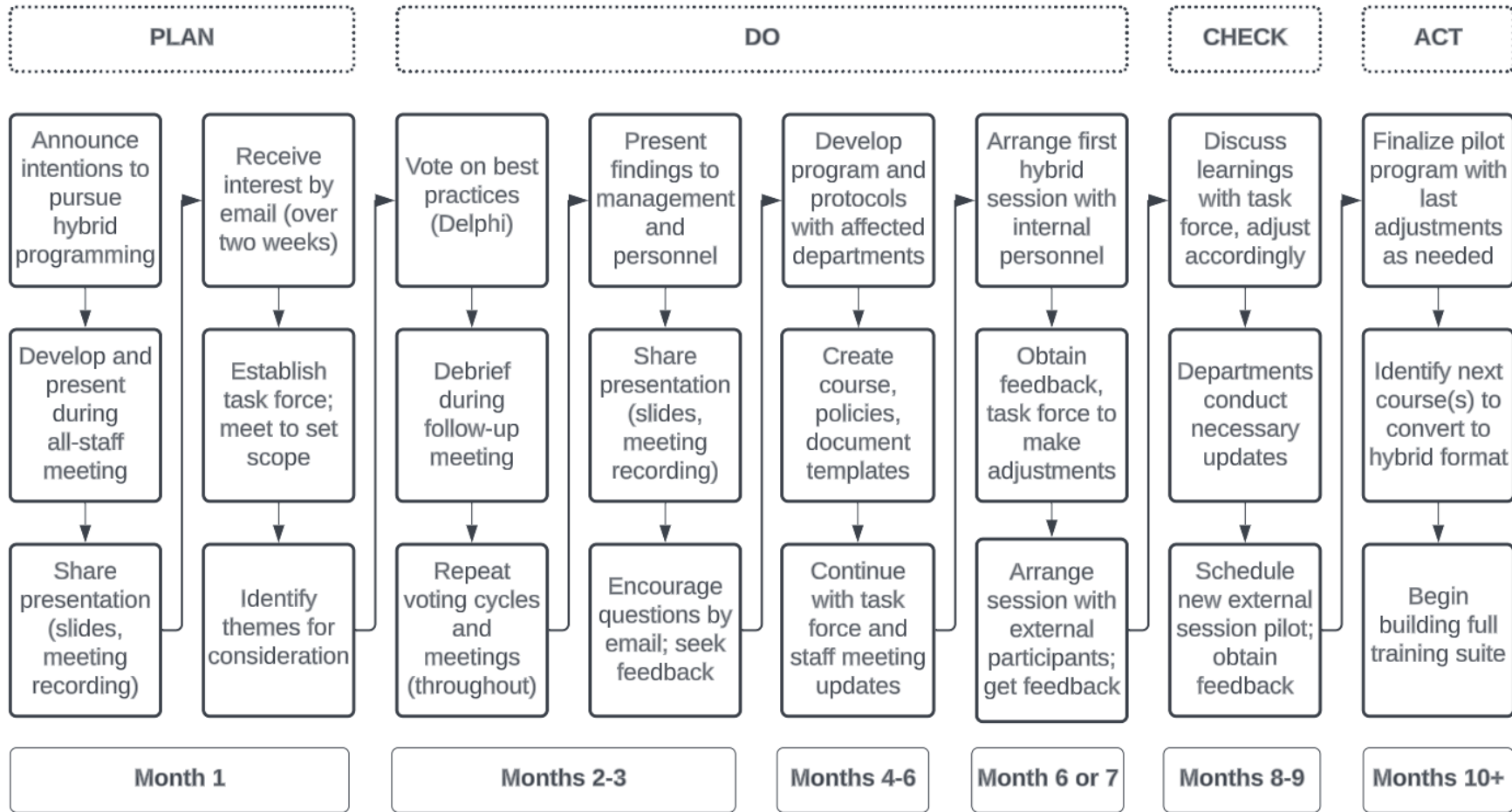
Note. Despite the hierarchical nature of this chart, WorkSafeHealth’s organizational culture still encourages those who are not in formal leadership positions to exercise autonomy and provide feedback and insights into operational decisions that affect them, resonating with an interpretivist organizational structure (Capper, 2019)

Appendix C: Applying the PESTLE Analysis Model to the Problem of Practice



Note. In applying the PESTLE model to my problem of practice, I highlight funding issues as a political focus; employer costs as an economic focus; geographic location considerations and equal access to health and safety training as a sociocultural focus; opportunities to mitigate the problem with learning technologies as a technological focus; mandates requiring the provision of health and safety training as a legal focus; and vehicle and driving hazard considerations as an environmental focus.

Appendix D: WorkSafeHealth’s Adoption of Hybrid Learning: A Timeline



Note. In this diagram, I provide a visual depiction of the series of steps to be taken throughout change plan implementation. This larger image is best situated in the change phase of Lewin’s changing as three steps, or CATS, organizational change framework.

Appendix E: Hybrid Learning Participant Feedback Surveys

Face-to-face learner hybrid learning experience: <SESSION NAME>

Thank you for providing your feedback on your experiences as a **face-to-face learner** in a hybrid learning environment. You will be asked to fill out another survey with general feedback on this course. This additional tool is designed to help WorkSafeHealth collect information about hybrid learning, specifically.

Audio/visual (technical) considerations

Using an X in the appropriate column, rate your experience as a face-to-face learner in a hybrid environment, using the rating scale provided. Use N/A for not applicable when appropriate.

Statement	Never	Seldom	Half the time	Most of the time	All the time	N/A
The instructor explained the hybrid learning process and environment to me.						
I could hear virtual participant questions and comments clearly throughout the session.						
Audio was clear (no distortions or overlap) when virtual participants were talking.						
Audio for other multimedia content (e.g., videos, audio clips) was easy to hear and follow along with.						
The PowerPoint presentation was clear and easy to follow on the televisions.						
I was able to view and follow along with videos and other visual multimedia content when presented.						
Visual setup with the classroom camera technology and virtual participants was easy to see and was not distracting.						

Statement	Never	Seldom	Half the time	Most of the time	All the time	N/A
Cameras were suitably positioned so that I could see what was happening in the face-to-face environment.						
Seeing virtual and face-to-face participants on screen was pleasant.						
During group activities with virtual learners, we had balanced participation among all group members.						
I was given opportunities to interact with virtual participants.						

Additional feedback on audio/visual (technical) aspects of hybrid learning:

The hybrid learning experience

Using an X in the appropriate column, rate your experience as a face-to-face learner in the following additional areas. **Select N/A for not applicable when appropriate.** Finish the statement: **As a face-to-face learner in a hybrid environment:**

Statement	Never	Seldom	Half the time	Most of the time	All the time	N/A
I was able to contribute to class discussions with ease.						
I felt included during group activities, as well as during activity debrief.						

Virtual learner hybrid learning experience: <SESSION NAME>

Thank you for providing your feedback on your experiences as a **virtual learner** in a hybrid learning environment. You will be asked to fill out another survey with general feedback on this course. This additional tool is designed to help WorkSafeHealth collect information about hybrid learning, specifically.

Audio/visual (technical) considerations

Using an X in the appropriate column, rate your experience as a virtual learner in a hybrid environment, using the rating scale provided. **Use N/A for not applicable when appropriate.**

Statement	Never	Seldom	Half the time	Most of the time	All the time	N/A
The instructor explained the hybrid learning process and environment to me.						
I could hear the instructors clearly throughout the session.						
I could hear participant questions and comments clearly throughout the session.						
The classroom audio was easy to follow along with in moments where more than one person was speaking or when there was extraneous noise.						
The PowerPoint presentation was clear and easy to follow on my screen.						
I was able to view and follow along with videos and other multimedia content when presented.						
I could see and follow along with additional notes written on chart paper, whiteboard walls, etc.						
The producer’s notes in the Chat panel helped to clarify and/or helped me follow along with instructions.						

Statement	Never	Seldom	Half the time	Most of the time	All the time	N/A
The OWL camera was suitably positioned to capture what was happening in the live classroom.						
A suitable classroom decorum for contributing (e.g., raising a virtual hand; unmuting when appropriate) was provided, and this enhanced my experience.						
I was given a suitable introduction to the Zoom platform and how to use the digital tools (e.g., feedback icons, Chat panel) to follow along with the learning experience.						

Additional feedback on audio/visual (technical) aspects of hybrid learning:

The hybrid learning experience

Using an X in the appropriate column, rate your experience as a virtual learner in the following additional areas. **Select N/A for not applicable when appropriate.** Finish the statement: **As a virtual learner in a hybrid environment:**

Statement	Never	Seldom	Half the time	Most of the time	All the time	N/A
I was able to contribute to class discussions with ease.						
I felt included during group activities, as well as during activity debrief.						

Statement	Never	Seldom	Half the time	Most of the time	All the time	N/A
My feedback and participation were actively and appropriately sought throughout the session.						
When I had a question or comment, I was acknowledged, and my feedback was requested.						
I felt included in the class dynamic (i.e., I didn't feel marginalized as an online learner).						
I was given sufficient, appropriate opportunities to take breaks during the course.						

Additional considerations for hybrid-virtual learners

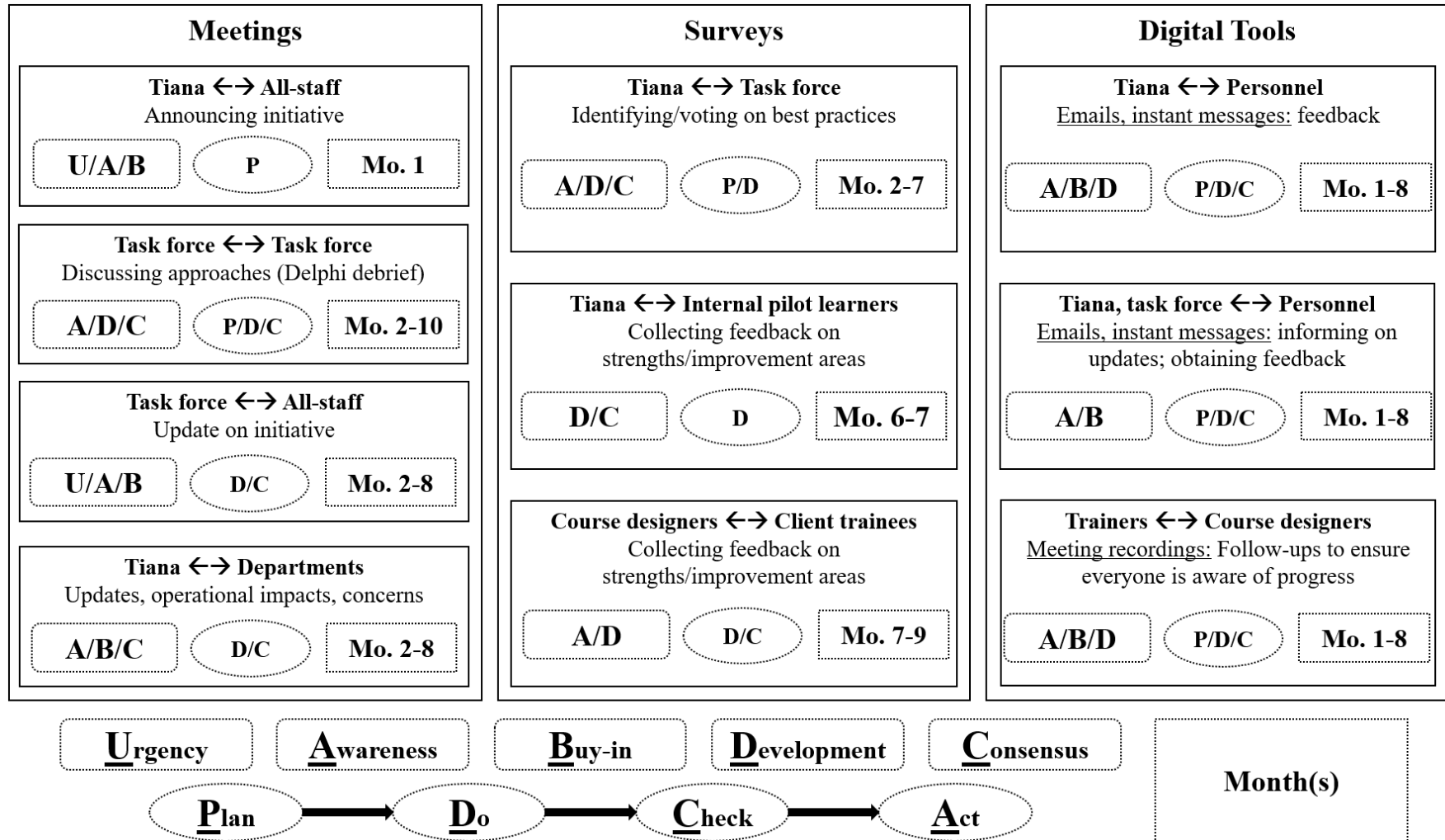
Hybrid learning is newer to WorkSafeHealth, and we want to make sure we build these courses correctly and effectively. Please provide feedback on some additional aspects of hybrid learning as a virtual participant by selecting your level of agreement with the following statements.

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	N/A
Course duration was appropriate and comfortable for me as a virtual learner.						
Using printed materials while following along with the session supported my learning experience.						

Additional comments about the hybrid learning experience:

Note. WorkSafeHealth has been offering face-to-face training sessions since its inception in 2010; however, the organization’s exposure to any virtual training has been a recent activity, with a massive transition to fully virtual instruction in 2020 as a response to the COVID-19 pandemic. The opportunity to collect additional information from virtual learners (denoted by the additional questions in their survey) who will participate in sessions built as extensions of face-to-face courses is of key importance. Feedback from this group is likely to heavily influence WorkSafeHealth’s approaches to ensure that virtual learners, who are not in immediate presence of the instructor, remain engaged and supported throughout a course. References to specific technologies have been made in these feedback surveys as they are tools currently utilized by WorkSafeHealth personnel in other hybrid virtual endeavours, such as industry-specific advisory committee meetings and occupational risk assessment workshops.

Appendix F: Visualizing a Knowledge Mobilization Plan and Hybrid Learning



Note. While communicators, audiences, messages, channels, rationales, and impacts—along with suggested timing per the implementation plan—are added, further elaboration on this knowledge mobilization plan is also highlighted in the table in Appendix G.

Appendix G: Describing a Knowledge Mobilization Plan and Hybrid Learning

By Whom?	For Whom?	How?	What is the Message?	With what Effect?	When?
WorkSafeHealth leadership team	Ministry of Labour, Immigration, Training and Skills Development officials	<ul style="list-style-type: none"> • Meetings (virtual, face-to-face) • Email, telephone conversations 	<ul style="list-style-type: none"> • Discuss the need for change (establish urgency) and associated value for clients 	<ul style="list-style-type: none"> • Receive endorsement while informing the governing body • Demonstrate WorkSafeHealth's innovative approach in supporting the Ministry's health and safety mandate 	<ul style="list-style-type: none"> • Plan: At the beginning of the change project with progress updates when requested (mandatory annual reports will also highlight progress)
WorkSafeHealth leadership team	WorkSafeHealth personnel	<ul style="list-style-type: none"> • All-staff meetings (Microsoft Teams) 	<ul style="list-style-type: none"> • Initially, discuss the need for change (establish urgency) and associated value for clients • Present leadership commitment to the hybrid learning initiative 	<ul style="list-style-type: none"> • Garner support and buy-in from WorkSafeHealth personnel • Emphasize that concerns about current delivery models are being addressed (internal stakeholder concerns with current delivery models have been heard) 	<ul style="list-style-type: none"> • Plan/Do/Check: At the beginning of the change project with bi-weekly progress updates (per all-staff meeting schedule)

By Whom?	For Whom?	How?	What is the Message?	With what Effect?	When?
Hybrid learning task force	Hybrid learning task force	<ul style="list-style-type: none"> Delphi voting rounds (Survey-Monkey) and follow-up meetings (Microsoft Teams) 	<ul style="list-style-type: none"> Share feedback on identified themes and associated best practices to create effective hybrid learning opportunities 	<ul style="list-style-type: none"> Achieve consensus on best practices to support this training delivery model Garner task force buy-in on adopted decisions Ensure all department considerations are addressed 	<ul style="list-style-type: none"> Plan/Do/Check: Every three weeks, at minimum, per schedule Surveys to be completed one week prior to meetings; immediate dissemination of results will permit review and preparation for subsequent meetings

By Whom?	For Whom?	How?	What is the Message?	With what Effect?	When?
Hybrid learning task force	Stakeholders' respective departments	<ul style="list-style-type: none"> • Department meetings (Microsoft Teams) • Email and telephone conversations • Instant messages (Microsoft Teams) 	<ul style="list-style-type: none"> • Open forum to discuss task force progress and obtain feedback on practices applicable to departmental operations 	<ul style="list-style-type: none"> • Garner commitment from individual departments • Keep personnel informed • Ensure considerations for optimal hybrid learning opportunities are brought forward • Promote organizational learning 	<ul style="list-style-type: none"> • Do/Check: All department meetings per their respective schedules (I will request that this be added as a standing agenda item and will emphasize reinforcement of the need to communicate with task force members to ensure it is addressed at these meetings)

By Whom?	For Whom?	How?	What is the Message?	With what Effect?	When?
Change leader (Tiana)	Hybrid learning task force	<ul style="list-style-type: none"> • Virtual survey platform (Survey-Monkey) • Meetings (Microsoft Teams) 	<ul style="list-style-type: none"> • Accumulate feedback on themes to be examined in determining best practices • Collect and disseminate votes on identified themes • Conduct open discussion on feedback to determine optimal approaches toward hybrid learning 	<ul style="list-style-type: none"> • Identify practices through which WorkSafeHealth can offer hybrid courses and enhance client access to training programs • Emphasize how stakeholder voices are encouraged and get heard (coinciding with participative and democratic leadership principles) • Garner support from the task force 	<ul style="list-style-type: none"> • Plan/Do: Monthly, at minimum, per schedule • I will be responsible for compiling, summarizing, and disseminating survey feedback for task force meetings, following the schedule noted above)

By Whom?	For Whom?	How?	What is the Message?	With what Effect?	When?
Change leader (Tiana)	WorkSafeHealth personnel (incl. leadership)	<ul style="list-style-type: none"> • All-staff meetings (Microsoft Teams) • Department meetings (Microsoft Teams) • Email and telephone • Instant messages (Microsoft Teams) 	<ul style="list-style-type: none"> • Discuss the need for change (establish urgency) based on an identified issue • Provide updates as a standing agenda item during all-staff meetings • Provide an opportunity for open forum discussions through which additional questions can be posed 	<ul style="list-style-type: none"> • Garner support and buy-in from WorkSafeHealth personnel • Provide another avenue through which stakeholder feedback can be brought forward • Strive to ensure all voices are heard (eliminate barriers that may silence individuals) • Ensure consistent messaging about the change initiative • Accumulate additional feedback with which to return to the task force • Inform WorkSafeHealth management of progress 	<ul style="list-style-type: none"> • Plan/Do/Check: Bi-weekly all-staff meetings and during department meetings as respectively scheduled • Instant messages and other communication forums will be used on an ad-hoc basis, based on when inquiries from all organizational stakeholders come to my attention

By Whom?	For Whom?	How?	What is the Message?	With what Effect?	When?
WorkSafeHealth personnel	Change leader (Tiana) Hybrid learning task force	<ul style="list-style-type: none"> • Various meetings (Microsoft Teams) • Email and telephone conversations • Instant messages (Microsoft Teams) 	<ul style="list-style-type: none"> • Inquire into project status • Provide ideas and enumerate potential concerns with progress 	<ul style="list-style-type: none"> • Further identify best practices based on insights from those in specific departments • Maintain fluid lines of communication • Engage stakeholders and foster buy-in and commitment for hybrid learning 	<ul style="list-style-type: none"> • Plan/Do/Check/Act: As required; per my personal approach to leadership and desire to hear all stakeholder concerns, I will encourage inquiries on progress throughout the hybrid learning initiative

By Whom?	For Whom?	How?	What is the Message?	With what Effect?	When?
WorkSafeHealth consultant-trainers and communications department personnel	Clients (existing and potential)	<ul style="list-style-type: none"> Email and telephone conversations General interactions (virtual, face-to-face) Printed media (e.g.: posters) Digital media (e.g.: website, social media) 	<ul style="list-style-type: none"> Announce new suite when an external pilot is scheduled 	<ul style="list-style-type: none"> Raise awareness and garner support for the project from WorkSafeHealth clients Advertise a new offering that may prove beneficial and palatable Have the opportunity to explain how this new delivery model is designed to address current issues associated with equitable access to training sessions 	<ul style="list-style-type: none"> Do/Check: Announce when a hybrid session is prepared to be offered to external clients Subsequent external pilots to refine identified issues will continue to be offered until best practices for hybrid learning are identified and institutionalized (Kotter, 2011)

Note. With the exception of the MLITSD, internal communications will precede discussions about hybrid learning with external stakeholders. WorkSafeHealth is not in a position wherein it formally requires ministerial support to proceed with this initiative; however, communication with this governing body will present WorkSafeHealth’s intentions to address current gaps in service delivery. When a concrete design plan is in effect, discussions with additional external groups can take place. In addition to the questions posited by Lavis et al. (2003) pertaining to knowledge transfer, I include reference to the timelines associated with this communication plan in the far-right column, aligning communication with the proposed timing included in the change implementation plan.