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## Rekindling Embers of the Past with Technologies of Today: Increasing LMS Adoption at an Ontario Secondary School

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### **Abstract**

The motivation behind this organization improvement plan is to reap the benefits of online learning to enhance teaching and learning, and consequentially increase student achievement. This organizational improvement plan addresses a problem of practice in an Indigenous ministry inspected secondary school in Central, Canada. Indigenous people are achieving fewer and lower levels of educational attainment compared to non-Indigenous counterparts (Statistics Canada, 2011) and Indigenous students in the community this change is situated in are likewise at-risk of widening this gap (Deloitte, 2018). To narrow this gap, this school is centered on using technology to pay tribute to the past. Online learning offers organizations a variety of teaching and learning benefits. In pursuit of enhanced outcomes, more and more K-12 organizations are attempting to adopt a Learning Management System; however, instead of experiencing the promised potential of online learning, organizations are receiving frustrations and lackluster results. The leadership approach selected to drive forward change in this endeavour is the adaptive leadership approach complimented with characteristics of situational leadership. The change path model is selected as the framework for leading the process of organizational change. Additionally, the plan, do, study, act model serves as the model for change. Collectively the change path model in tandem with the plan, do, study, act model and former leadership approaches collectively work together to implement, evaluate, and communicate the change.

*Keywords:* Learning Management System (LMS), Adoption, Adaptive Leadership, Situational Leadership, Change Path Model

# INCREASING LMS ADOPTION

## **Executive Summary**

As a former Training Specialist at Desire2Learn (D2L) and present Learning Management System (LMS) Consultant/Teacher, I have experienced from both a teaching and leadership perspective frustrations associated with implementing and adopting a LMS. Experiencing difficulties with adopting a LMS are not only anecdotally apparent but are commonplace in the literature (Al-busaidi, Kamla, & Hafedh Al-shihi, 2012; Black, Beck, Dawson, 2007). Although LMSs were originally predominately utilized in higher education and enterprise environments, they are increasingly being attempted to be utilized in Kindergarten to grade Twelve (K-12) schools (Liu & Cavanaugh, 2011). Frustrations are likewise commonplace in K-12 contexts and early adoption efforts are having lackluster results (Stockless, 2018; Fitzsimmons, 2016; Laho, 2019). After observing these difficulties first-hand, I have become galvanized to help teachers and organizations alike overcome these problems to instead reap the benefits associated with online learning and increase student success. When I joined my present organization, they have just begun to experiment with utilizing LMSs in the school. In my current role, it is my responsibility to facilitate the implementation and adoption of a LMS at our organization. This OIP focuses on how I as a change leader can successfully implement and increase LMS adoption at my institution.

Chapter 1 introduces the problem. It begins with situating the organization within its organizational context. In this section the organization's history is explained, the organization is analyzed, and its mission, vision, organizational structure, and established leadership approaches are discussed. This OIP centers on an Indigenous secondary school founded with the purpose to mobilizing Indigenous knowledge and increasing student success. The organization has a hierarchical structure and a democratic leadership style. Upon my own personal reflection, my

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leadership style is described using the tool of metaphor as a gardener, and both the adaptive and situational leadership approach are selected to drive this change forward. The theoretical lens this research is viewed through is the Indigenous worldview. Once the leadership position and lens are explained, a succinct Problem of Practice (PoP) statement is formed and situated within the context of organization with the goal of increasing LMS adoption. This PoP is then positioned within existing research, and relevant data is utilized to showcase why the organization needs to undergo the change. Afterwards, this PoP is delved into deeper, guiding questions that emerge for the PoP are explored. To form a leadership focused vision for change and showcase the present gap, the organization's current and envisioned state are both carefully expressed. Finally, to determine if the organization is ready for change, Chapter 1 concludes with an organizational readiness assessment.

After the organizational context and problem are introduced, Chapter 2 centers on the OIP's planning and development. This chapter begins with describing the conceptual framework that will be used to guide the OIP. It then categorizes this form of change as incremental and anticipatory and selects the tuning method as the most appropriate framing theory. The change path model is then selected as the best framework to lead the change process. To propel change forward, components of the adaptive leadership approach (situational challenges, leader behaviours, and adaptive work) and situational leadership (directive behaviours) are all applied to the organization. Nadler and Tushman's Congruency model serves as a framework to consolidate and address previous organizational change readiness findings and identify additional gaps that will be addressed with relevant research. Three possible solutions to the problem are then each carefully analyzed and evaluated. Due to its strengths, minimal weaknesses, and alignment with the type of change, leadership approaches, and Indigenous worldview incremental LMS adoption

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is selected as the optimal solution. The PDSA model is then determined to serve as a model for change to carry-out this proposed solution. Finally, this chapter concludes with an in-depth discussion of three ethical questions that are related to this OIP.

After the planning and development portion has concluded, Chapter 3 focuses on the implementation, evaluation, and communication components of the OIP. The plan stage from the PDSA cycle and the awakening and mobilization stages from the change path model, complimented with elements of the adaptive and situational leadership approaches, culminate to form a framework of the change implementation plan. As this plan is progressed through, how to effectively deal with a variety of stakeholder reactions, empower staff members, determine supports, and address implementation challenges are discussed. Do, study, and act stages from the PDSA cycle, the acceleration and institutionalization stages from the change path model and components from both the adaptive and situational leadership approaches are combined to form the framework for the change process monitoring and evaluation section. As this plan is progressed through, tools and qualitative and quantitative measures to assess and evaluate the change are provided and elaborated upon. The plan to communicate the need for change and the change process are organized into the phases of communicating change, aligned with the stages of the change path model, and reinforced with strategies from the strategic employee communication model. In this section the plan to both build awareness and communicate clearly and persuasively are discussed. The final next steps and future considerations section acknowledges change as imminent, summarizes each Chapter, and concludes with how this OIP is applicable for organizations interested in increasing their own LMS adoption.

### **Acknowledgments**

Throughout the last few years of this educational journey I have undoubtedly many people to thank. I would like to begin with thanking the administration and faculty at Western University. I have appreciated all your feedback, direction, and most importantly our conversations throughout this experience. I would also like to acknowledge Academy X. I value all the leadership opportunities you have provided me with including undertaking this change initiative which this Organization Improvement Plan (OIP) is based upon. I would also like to send my sincere appreciations to my friends and family. Whether it was coordinating social gatherings or family events around my due dates or regularly listening to my progress updates throughout this program, I have always immensely appreciated your flexibility and ongoing support. Lastly, and most importantly, I would like to thank my dear wife Shelby Medway aka “Boopy.” I want to thank you for first allowing me to take on this journey and for continuously being there for me throughout the ups and downs of this experience. Moving forward I plan to spend as much time as I can with you and Remmington to make up for all the time you dedicated to me in completing this journey. As I close this chapter of my life, I look forward to continuing to write our story together. Thanks, and I love you dearly.

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### Glossary

**Adoption:** The decisions an individual makes that determines if the individual will ultimately accept or reject a form of technology (Straub, 2009).

**Adaptive Leadership:** The Adaptive Leadership approach is defined as “the practice of mobilizing people to tackle tough challenges and thrive” (Heifetz, Grashow, and Linsky, 2009, p. 14).

**Change Path Model:** The Change Path Model is a rigorous model for change that combines both prescription and process to facilitate organizational change through the following four stages: awakening, mobilization, acceleration, and institutionalization (Cawsey et al., 2016).

**Concern Based Adoption Model (CBAM):** The Concerns Based Adoption Model views an innovation’s adoption within an educational organization as a developmental process and the more levels of concern of individuals are reduced by the leader the higher the level of adoption is expected (Hall et. al., 1973).

**Diffusion of Innovations (DoI):** The concept of Diffusion of Innovations first originated to describe how a product (e.g. seed) spreads throughout a population (Rogers, 1962). In Roger’s most recent research, this concept has evolved to explain how an innovation/idea can spread throughout an organization and five different levels of adoption are provided to characterize various degrees of adoption including: innovators, early adopters, early majority, late adopters, and laggards (Rogers, 2003).

**Indigenous Worldview:** The Indigenous worldview is characterized in this organizational improvement plan as embracing the Two-Eyed Seeing approach. Two-Eyed-Seeing is “learning to see from one eye with the best in the Indigenous ways of knowing and from the other eye with the best in the mainstream ways of knowing, and most importantly, learning to see with both eyes together-for the benefit of all” (Munroe, 2013, p. 327).

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**Learning Management System (LMS):** Learning Management Systems originated from the Internet being utilized in classrooms (Aslan & Reigeluth 2011) and their origins can be traced back to integrated learning systems centered on providing instructional content (Watson & Watson, 2007). Today, they have progressed beyond instructional content and can be thought of as a self-contained webpage with instructional tools (content areas, assessment, communication etc.) to engage students in online learning (Ellis & Rafael, 2007; Laster, 2005).

**Nadler and Tushman's Congruence Model:** Nadler and Tushman's Congruence Model is another form of organizational analysis that examines how an organization's strategy transforms its inputs into outputs to uncover what is needed to change (Nadler and Tushman, 1989).

**Online Learning:** From my professional experience, the term Online Learning is often used as an umbrella to refer to many types of digital learning but can be classified into two main delivery approaches—blended learning and fully online learning. Blended learning is often described as face-to-face instruction with components of online learning; whereas, fully online learning often refers to independent online learning with no in-person interactions between the student and the instructor (Singh & Thurman, 2019).

**Organizational Improvement Plan (OIP):** An Organizational Improvement Plan is “a major persuasive research paper that provides evidence-based pathways to address organizational problems, and more broadly, serve the public and/or social good. It is a practical yet theory and research-informed plan that aims to address and find solutions for a particular problem of practice through leading meaning change to salient problems of practice within in the organization” (Western, 2017, p. 1).

**PESTE:** The PESTE is an acronym for Political, Economic, Social, Technological, and Ecological/Environmental factors and is commonly utilized to analyze how external variables in

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the broader environment can shape an organization's context and impact organizations (Cawsey, Deszca, & Ingols, 2016).

**Problem of Practice (PoP):** A Problem of Practice is a problem in one's workplace when value/goals are not being fully satisfied and has the potential to arrive at enhanced outcomes for the organization and the community it is situated in (Bacchi, 2012; CPED, 2016; Pollock, 2013).

**Situational Leadership:** Hersey and Blanchard (1988) coined the term Situational Leadership as "an interplay among (1) the amount of guidance and direction (task behaviour) a leader gives, (2) the amount of socioemotional support (relationship behaviour) a leader provides, and (3) the readiness level that followers exhibit" (p. 170).

**Technology Acceptance Model (TAM):** The Technology Acceptance Model originally centered on offering ways to predict user acceptance of computers (Davis, 1989). The two components of this model Perceived Usefulness (PU) and Perceived Ease of Use (PEU) were hypothesized to be important variables in determining users' acceptance of computers (Davis, 1989). PEU is defined as "the degree to which a person believes that using a particular system would be effort free" (Davis, 1989, p. 333). PU is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989, p. 333). Today, both these approaches are commonly utilized to increase adoption of a variety of forms of technologies within organizations.

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### **Acronyms**

CBAM (Concern Based Adoption Model)

D2L (Desire2Learn)

DoI (Diffusion of Innovations)

EAs (Educational Assistants)

HR (Human Resource)

IK (Indigenous Knowledge)

K-12 (Kindergarten to Grade Twelve)

LMS (Learning Management System)

MIS (Ministry Inspected School)

MoE (Ministry of Education)

OCT (Ontario College of Teachers)

OIP (Organization Improvement Plan)

PESTE (Political, Economic, Social, Technical, Environmental)

PEU (Perceived Ease of Use)

PDSA (Plan Do Act Study)

PoP (Problem of Practice)

PU (Perceived Usefulness)

REA (Reciprocal Education Agreement)

SMART (Specific, Measurable, Attainable, Reliable, Timely)

STEAM (Science, Technology, Engineering, Art, Math)

TAM (Technology Acceptance Model)

## Chapter 1: Introduction and Problem

Chapter 1 sets the stage for the problem. Investigating problematizations is a strategy with the goal of achieving a higher level of critical consciousness to arrive at enhanced outcomes (Bacchi, 2012). To attain a deeper level of understanding and ultimately improve students' achievement, problematizations will be introduced and examined. This chapter is comprised of the following sections: organizational context, leadership position and lens statement, leadership problem of practice (PoP), framing the PoP, guiding questions, leadership-focused vision for change, concluding with organizational change readiness.

### Organizational Context

An Organizational Improvement Plan (OIP) provides evidence-based pathways to remedy present organizational problems. This OIP is centered on a small Indigenous Ministry Inspected School (MIS) secondary school in Central, Canada. To safeguard this organization's anonymity, it will be referred throughout this OIP as Academy X and the college it is affiliated with will be referred to as College X. Schools are not isolated organizations but instead are immersed in and are impacted by the contexts that they are situated within. To effectively make sense of an organization, one must understand its context (Knowles, Squire, & Cole, 1999). To begin to effectively understand the organizational context of Academy X, the following will be discussed: a short history of the organization, an organizational analysis, organizational vision, mission and values, and the existing organizational structure and leadership approach.

**Short history of Academy X.** Before Academy X came to fruition, College X was first conceived. In 1993, College X was founded by a group of community members who were galvanized to create culturally relevant courses and programs at the post-secondary level to better serve the local Indigenous community (Academy X Staff Manual, 2019-2020). In September 2017, Academy X was similarly founded to better meet the educational needs of

secondary Indigenous students. Academy X is a MIS and is open to both Indigenous and non-Indigenous students from the nearby reserve and local community. What differentiates this school from other secondary schools is Academy X students are given the opportunity to take college courses throughout the program. This pathway allows students to finish their educational journey in 5 – 6 years while earning both a high school diploma and a college certification—all tuition free (Academy X, 2019). Since its inception, Academy X had been strategically building the school incrementally one grade cohort at a time. Academy X is presently in its third year of operation with an approximate student population of 120 students in grades nine, ten, and eleven. It's comprised of 31 staff members: fourteen teachers, eight educational assistants (EAs), two administrators, a development manager, consultant, learning resource teacher, community coordinator, child and youth worker, counsellor, and an office manager.

**Academy X: PESTE analysis.** Political, economic, social, technological, and ecological/environmental (PESTE) factors all contribute to defining and continuously shaping the organization (Cawsey, Deszca, & Ingols, 2016). A PESTE analysis will aid to develop awareness and understanding of the organizational context of Academy X.

*Political.* Indigenous educational organizations are just beginning to be valued by the government and receive their long overdue political support. For instance, teaching Indigenous history and culture are now a compulsory component of the provincial curriculum (Johnson, 2017). Further commitment to Indigenous education is also evidenced through several recent initiatives by the Ministry of Education (MoE) in Indigenous Education in Ontario (2019) including: board action plans, Indigenous education leads, Indigenous education advisory councils, voluntary and confidential Indigenous student self-identification, increased MOUs between the provincial governments and Indigenous groups, the Truth and Reconciliation



Commission, classification of First Nation schools within the Education Act, support for Indigenous languages, and increased investments to support culturally relevant child care. Considering the increased amount of initiatives for Indigenous education, Academy X is in a prime position to continue to be on the receiving end of this support and has already received a substantial amount of media attention. Former Minister Jane Philpot recently toured Academy X and described the school as being “nothing short of revolutionary” (Johnson, 2018). After showcasing the cornucopia of political initiatives that are all being invested in Indigenous education, there is a strong likelihood that Academy X’s political support will only continue.

*Economic.* Economic factors for Academy X relate to funding. Initial funding for Academy X came from Federal grants from the Truth and Reconciliation Committee. Additionally, since Academy X is classified as a MIS and not a provincially funded public school, it is easier for Academy X to accept both monetary and service donations from companies within the private sector. IBM, Actua, and RBC are all organizations that have supported Academy X in its early years. Furthermore, recently the Reciprocal Education Approach (REA) secured Academy X’s future funding. According to the MoE (2019) REA is designed “to ensure eligible First Nation students and their families are supported by a consistent and transparent process when they choose to study at a publicly funded school or a First Nation-operated school (para. 3)...Under the previous approach, formal agreements on base fees were required for First Nation students” (para. 6). This agreement stipulates if students choose to attend Academy X instead of a public school, their public funding will become redirected from the public system to Academy X and then directly invested within their educational experience at the school. As Academy X continues to attract more students and continues to collect funding

from a variety of revenue streams, (REA, government grants, and the private sector) its economic future is secured.

***Social.*** The largest social factor impacting students at Academy X is Canada's former involvement in the residential school system. The Canadian government's involvement in residential schools has been responsible for physical, sexual, and emotional abuses of Indigenous students and today remains a blemish in Canada's history (Miller, 2016). In the 16th century, the government became focused on removing the Indian from the child through assimilation (Hare, 2004). After initial efforts proved ineffective, residential schools were established to remove First Nations' children from their community to assimilate them. At these residential schools many students experienced severe spiritual, emotional, physical, sexual, and mental abuse (Hare, 2004). Although Justin Trudeau has recently supplemented Stephen Harper's formal apology in 2008 for the government's involvement in the residential school system, much healing remains to be done (McIntyre, 2017). A residual impact of the residential school system today is many Indigenous students' family members who are survivors of the residential school system still harbor distrust with the education system. It is more important now than ever that Academy X acknowledges this social issue and does what it can to rebuild relationships with the Indigenous community. Indigenizing the curriculum, teaching traditional languages classes in-fulfillment of students' language credit, and involving elders and community members are a few small steps forward that Academy X is making to rebuild relationships and mitigate this social factor.

***Technological.*** As much as the school is focused on Indigenous ways of knowing it is as equally focused on embracing twenty-first-century technologies including an emphasis on STEAM (Science, Technology, Engineering, Art, and Math) (Academy X, 2019). Although Academy X follows the same curriculum expectations as all secondary schools in Ontario, how it

meets those expectations is what distinguishes it from the rest. All courses are infused with Indigenous content and technology. An example of Academy X embracing technology is also demonstrated through its relationship with IBM and Actua. Academy X has formed a partnership with IBM and Actua where each company contributes to school programming on technology related topics (e.g. careers in technology, communication technology, design, internet, electrical circuits, coding, and a variety of STEAM based activities) (IBM, 2019; Johnson, 2019).

Considering Academy X's commitment to use technology to pay tribute to the past, its students are in a prime position to discover the latest and greatest technologies.

***Ecological and environmental.*** Academy X is passionate about ecological and environmental issues. A concern for the environment is regularly discussed by leaders, guest speakers, and teachers within the school. Academy X also acknowledges and values knowledges that can only be acquired through land-based learning. Their passion for the environment and the land is demonstrated through its investment in creating a land-camp program in-partnership with Actua and Western University. Academy X's land camp program is a course where students are given the opportunity to camp outside for fifteen days and live and learn off-the-land in exchange for a high school credit (Johnson, 2019). Academy X's consistent discourse on environmental sustainability and its involvement in land-based learning speaks volumes of how much they value learning from the land and addressing ecological and environmental issues.

***Organizational vision, mission, and values.*** Academy X School Handbook and Course Calendar (2019-2020) states the vision of Academy X is "A school community practicing the Indigenous groups' values of Ganigohi:yo/Kanikonhri:io. A safe, compassionate and caring environment where students successfully develop academically, socially, and culturally" (p. 6). These values include fairness, sharing, honesty, kindness, confidentiality, consistency, integrity,

responsibility, cooperation, openness, and trustworthiness. These values are posted in every classroom in the school. To get these values off the walls and into the halls, these values are celebrated on a monthly basis by the school democratically voting to recognize students with certificates who have effectively displayed the characteristics of these values. Lastly, the mission of Academy X is “to provide students with the knowledge, abilities and attitudes to create a pathway that enables them to become confident, proficient and skilled leaders of their community and society in general” (School Handbook and Course Calendar, 2019-2020). As Academy X continues to mature, it has recently prioritized “mobilizing Indigenous knowledges” and “supporting student success” as its two overarching goals (School Handbook and Course Calendar, 2019-2020). To mobilize Indigenous knowledge, a community coordinator has been hired to collect Indigenous content and consult with teachers on how they can Indigenize their courses. To strive toward student success, based upon previously collected data Academy X has set a benchmark of every student earning this school year 7.0 out of a possible 8.0 credits.

**Organizational structure and leadership approach.** The organization has a hierarchical structure. Both College X and Academy X are facets within the same organization. They are both governed by the board, CEO, and then branched off into a variety of departments supervised by directors. Please refer to Figure 1.

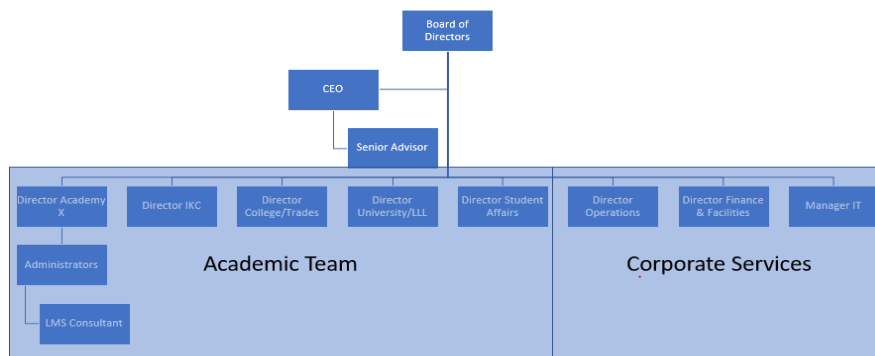


Figure 1. College X and Academy X Hierarchal Structure

College X and Academy X are both part of the academic team and are impacted by the same governing structure (e.g. Board of Directors) and corporate services policy that stipulates procedures and practices (e.g. Personnel Policy) across the entire organization. Academy X is in many respects governed by College X as it controls its resources (e.g. financial) and process (e.g. decision-making abilities) and is expected to follow policy developed by the college (College X Personnel Policy, 2013), Academy X's mission and vision are aligned with College X but are still unique to Academy X (Academy X Handbook and Course Calendar, 2019-2020).

The leadership approach of the organization stems from the culture of the local Indigenous group. According to Price (2007) the Indigenous population of the area was "participatory democracy with an equitable distribution of economic, political, and social power, and inclusive social, economic, political, and social power, and ideal trinity of protection, provision, and participation for its entire people" (p. 16-17). This is consistent with a democratic leadership approach. This mindset is alive and well today as leaders in the organization often provide team members with opportunities to provide their insight before decisions are made.

**Organizational context summary.** This first section lays the foundation for this OIP by investigating the organizational context Academy X is situated within. A short history of Academy X and College X it is affiliated with was provided to understand how it has been formed to be the way it is today. To delve into the complexities of Academy X, a PESTE analysis was performed. Afterwards, the vision, mission and values of Academy X were discussed. Finally, this section concluded with a visualization of the organizational structure of Academy X and the predominant organizational leadership approach. As much as it is important to understand the organizational context of Academy X, as I prepare to take the helm of this change initiative, it is equally important for me to identify my own leadership position and lens.

### **Leadership Position and Lens Statement**

Although there are almost as many definitions of leadership as there are people defining it (Stogdill, 1974), common characteristics of my leadership style manifest themselves into categorizations of leadership approaches. Additionally, the world looks very different depending on where you are standing and the lens you are viewing it through (Rottmann, 2007). In this section, to uncover my leadership position my current role's responsibilities followed by a reflection of my own leadership style will be discussed. Afterwards, the Indigenous worldview will then be discussed and situated as the lens this OIP will be viewed through.

**Leadership position.** In my current role I am employed at Academy X as a Teacher and a LMS Consultant. As a teacher it is my responsibility to meet all the requirements listed in the Teacher Preparation for Classroom Inspection provided by the MoE (e.g. attendance records, samples of student work, assessment as, for, and of learning etc.) (Private Schools Policy and Procedures Manual, 2013). The other side of my role is given more latitude. As a LMS Consultant, it is my responsibility to select, implement, and lead the change of adopting a LMS at Academy X. In this role any financial decisions must be submitted for approval by our school steering committee and signed-off by the IT Manager; however, I have the discretion to determine training, ongoing support, and ultimately how-to best increase LMS adoption.

**Leadership as a gardener.** Throughout my professional experience, whether my followers were students or educators, one theme that has always been consistent amongst my interactions is I have always been centered on helping others learn. Alvesson and Spicer (2011) propose using metaphors as a tool to articulate the complexity and ambiguity of leadership approaches. A metaphor that aligns closely with how I view myself as a leader is a leader as a gardener. Alvesson and Spicer (2011) define these leaders as "Leadership through facilitating growth" (p. 76). Like a gardener strives to cultivate its garden, I also aim to provide my

followers with support to facilitate opportunities for them to grow to reach their own potential. Being centered on growth, I value staff members who are motivated lifelong learners. I also acknowledge that it is idealistic of me to assume that all staff who I work with will share this same mindset. It is my goal to inspire all staff to never stop growing. In addition to being centered on helping others grow, my personal leadership approach also focuses on tailoring my leadership approach to my followers needs.

***Situational leadership.*** In my current position, I frequently tailor my level of support based upon the development levels of the team members I am leading. Hersey and Blanchard (1988) coined the term Situational Leadership as “an interplay among (1) the amount of guidance and direction (task behaviour) a leader gives, (2) the amount of socioemotional support (relationship behaviour) a leader provides, and (3) the readiness level that followers exhibit” (p. 170). Moreover, Hersey and Blanchard (1988) summarize Situational Leadership as simply “moment-by-moment decisions necessary to effectively influence other people” (p. 170). Just as I differentiate my level of support to students in the classroom, I will similarly tailor my type of support to staff based upon their unique LMS needs throughout this change.

***Adaptive leadership.*** Leadership as a gardener and situational leadership effectively describe my leadership style within my former and current role; whereas, adaptive leadership will be leveraged to drive this change initiative forward. Heifetz, Grashow, and Linsky, (2009) define Adaptive leadership as “the practice of mobilizing people to tackle tough challenges and thrive” (p. 14). More specifically, adaptive leadership “is an iterative activity, an ongoing engagement between you and groups of people” (p. 8) including situational challenges, leader behaviours, and adaptive work (Heifetz et al., 2009). The adaptive leadership approach provides a blueprint to advance change. Following this approach, educational leaders are encouraged to

check-in with staff members, strive to discover why teachers are avoiding work, create a safe environment to regulate stress, discuss unaddressed issues, empower team members to solve problems themselves, and advocate for all voices (Heifetz et al., 2009). Following these leader behaviours will aid to guide and move this change forward.

**Theoretical lens.** To effectively prepare for the future one must first honour the past. According to Rocco and Plakhotnik (2009) a theoretical framework “synthesizes existing theories and related concepts and empirical research, to develop a foundation for new theory development” (p. 127). A theoretical framework is a collection of many accepted theories or is based upon one dominant theory (Rocco & Plakhotnik, 2009). Drawing from existing theory will provide focus to the study (Adom, Dickson, Hussein, Emad & Adu--Agyem. 2018). To pay tribute to the past and provide academic rigor to this endeavour, the Indigenous worldview will serve as the theoretical framework that this research is viewed through.

**Indigenous worldview.** The Indigenous worldview was selected because Academy X is an Indigenous MIS centered on traditional Indigenous ways of knowing complimented with Western knowledges. Most educational stakeholders (staff, students, parents/guardians) are Indigenous. If a change is ever going to be successful at Academy X, it must recognize and value the Indigenous identities that the organization was founded upon, operated from, and are intended to serve. Looking through an Indigenous lens views the world through Two-Eyed Seeing. According to Munroe et al. (2013) Two-Eyed-Seeing is “learning to see from one eye with the best in the Indigenous ways of knowing and from the other eye with the best in the mainstream ways of knowing, and most importantly, learning to see with both eyes together-for the benefit of all” (p. 327). Moreover, the Two-Eyed Seeing approach “[recognizes] the best from both worlds...Crucial elements include a co-learning philosophy, connection with culture



and community, a psychologically safe classroom, and Aboriginal pedagogy” (Hatcher, Bartlett, Marshall, & Marshall, 2009, p. 141). This lens is parallel to the mindset of the school. An LMS’s technology has the potential to rekindle traditional ways of knowing to celebrate the best from both worlds. Furthermore, Munroe et al. (2013) maintains Indigenous education needs to be “curriculum rooted in community knowledge that connects the local to the global” (p. 327). Knowledge that we can retrieve from elders in the community (while carefully ensuring sacred knowledges are kept sacred) can be captured in a repository with the LMS and then made available to everyone throughout the entire organization to benefit from. The Indigenous worldview will help to guide this research by underscoring the importance of both Indigenous and mainstream ways of knowing and by ensuring the curriculum is rooted in the community and the culture. Delving deeper into the Indigenous lens of the area, culture and philosophy needs to be given attention (Hill, 2009). Both treaties and epistemology from the local Indigenous group are examples of culture and philosophy that provide depth into the Indigenous worldview.

*Indigenous treaties: Two Row Wampum.* The Two Row Wampum represents an ancient treaty and agreement between the local Indigenous group and the Dutch settlers. One row represents an Indigenous canoe filled with Indigenous culture and customs and the other row represents a Dutch canoe filled with Western culture and customs (Muller, 2007). Each row is meant to coexist and travel together but to not at any point cross each other (Muller, 2007). The Two Row Wampum will guide this research by serving as another reminder to ensure Indigenous ways of knowing and Western knowledges are equally valued.

*Indigenous epistemology: tree of peace.* The symbol of College X and Academy X is a great white pine. The white pine symbol originates from The Great Law of Peace. A thousand years ago during a time of warfare that had been going on for hundreds of years, a Huron

Peacemaker and a Mohawk advocated for respecting and accommodating differences (Lambe & Swamp, 2002). In this Indigenous epistemology, there was a Tree of Peace symbolized by a great white pine that was as tall as the sky visible to everyone (Bomberry, 2013). To restore peace to all the nations the peacemaker uprooted the great white pine and told everyone to put aside their differences and bury their weapons underneath the tree (Bedford & Workman, 1997). According to Bedford and Workman (1997) “the richness and depth of The Great Law can be appreciated fully. For although it is a text about inter-na-tion(al) relations, it is also a document about living well and of how the relations between nations form an integral part of living well” (p. 88). This message could not come at more of an important time as relationships need to be rebuilt with Indigenous families impacted by residential schools (Hare, 2004). The Great Law of Peace will influence this research by serving as a reminder to continue to work together with the Indigenous community and continue to mend relationships for the greater well-being of all stakeholders.

In sum, the Indigenous worldview will ensure this endeavour is viewed through a Two-Eyed Seeing approach that values both traditional and mainstream ways of knowing. The Two-Row Wampum is an Indigenous treaty that supports this notion and the tree of peace is a form of Indigenous epistemology that provides a reminder to continue to foster meaningful relationships with the local community and to work together for the benefit of all. Now that the organizational context, leadership position, and lens statement have become transparent, it is time to defining the problem at Academy X.

### **Leadership PoP**

A PoP is a problem in one’s workplace when value/goals are not being fully satisfied and has the potential to arrive at enhanced outcomes (Bacchi, 2012; CPED, 2016; Pollock, 2013). The PoP investigated in this endeavour is both a problem and an opportunity. Resolving this PoP has the potential to not only pay the organization dividends but, Belzer and Ryan (2013)

maintain has the capacity to improve the lives of stakeholders directly involved, the institution, community, and society. The stakes couldn't be higher. The leadership PoP will begin with a general discussion of the problem, funneling down to Academy X's PoP statement.

**What is the problem?** Despite its promised potential, organizations in the past and still today are having trouble with adopting technology (Davis, 1989; Hall, 1979; Rogers, 2003). LMSs are a form of educational technology that are likewise difficult to adopt by organizations. Although there are many definitions of LMSs, LMSs can be thought of as a self-contained webpage with instructional tools (content areas, assessment, communication etc.) to engage students in online learning (Ellis & Rafael, 2007; Laster, 2005). LMSs are being utilized today in a variety of industries with the largest ones being: 21% in education, 12% in technology, 9% in manufacturing, followed by 7% in healthcare and 7% in consulting (Pappas, 2015). Within education, LMSs have become mainstream in higher education organizations (Walker, Lindner, Murphrey, & Dooley, 2016); however, more and more K-12 organizations have also begun to utilize LMSs in the classroom. According to Liu and Cavanaugh (2011) "The United States has experienced an extraordinary growth in online education at the K-12 level since its emergence in the late 1990s" (p. 38). As LMSs usage continues to expand throughout K-12 classrooms, if they are not carefully adopted frustrations and lackluster result will continue to follow.

As more and more organizations continue to attempt to adopt LMSs in pursuit of its potential, it must be recognized that a technology is only as valuable as the individual's willingness and ability to implement it (Hall & Hord, 2011). As the classroom struggles to keep pace with the evolving outside world, educators are now tasked with the responsibility of bridging this gap. Many organizations who have undertaken this change initiative have experienced lackluster results. De Smet, Schellens, Wever, Brandt-Pomares, and Valcke (2016)

supports this outcome stating, “from 376 Flemish secondary school teachers, only 10% actively use the learning path module” (p. 1077). Canadian schools are no exception. Teachers in Canadian K-12 schools “In reality...use the pedagogical functions at their disposal only rarely, if at all” (Stockless, 2018, p. 1103). Katie Fitzsimmons is an Instructional Coach for teachers in Ontario and has similarly observed this problem as she describes how teachers often start using the instructor tools at the beginning of the year but do not end up using blended learning throughout the year (Fitzsimmons, 2016). This tendency was also displayed in another recent K-12 school study that found despite the promised potential of communication methods available within a LMS, less than half of parents (43.2%) and teachers (47.0%) felt comfortable using a LMSs communication tools (Laho, 2019). Repeatedly what seems to inevitably occur is LMSs are perceived to have a lot of potential, are abandoned as the school year progresses, and if utilized, are inconsistently adopted amongst staff within an organization resulting in inconsistent experiences for students and parents/guardians. Ineffective adoption of an LMS may result in not only missing out on the promised benefits of LMSs, but instead may even hinder teaching and learning in classrooms.

***PoP statement.*** An emerging challenge amongst educational institutions has been difficulty with facilitating widespread adoption of a LMS throughout their organization. The effects of limited LMS adoption are wide reaching from inconsistent usage and ineffective use of school resources to potentially even hindering educators’ and students’ capacity to teach and learn. As a former LMS Training Specialist and present LMS Consultant/Teacher, the symptoms of this difficulty were anecdotally apparent when interacting face-to-face with former clients and are today apparent amongst Academy X stakeholders. Several studies have likewise identified frustration and discomfort from stakeholders as symptoms of this problem (Al-busaidi, Kamla, &

Hafedh Al-shihi, 2012; Black et al., 2007). In my current role, it is my responsibility to facilitate the implementation and adoption of a LMS at our school. In this position, the PoP under investigation is as Academy X takes its first steps forward with implementing an LMS, how can I as a leader successfully increase LMS adoption at Academy X over time? Now that a concise PoP statement has been crafted, it is important to understand why Academy X needs to change.

### **Framing the PoP**

Sinek (2009) argues for leaders to inspire others they must start with addressing why. In this section the PoP will be situated in the broader contextual forces shaping the practices that form the problem by discussing: the historical overview of the PoP, pertinent organizational theory, recent literature, a PESTE analysis of the PoP, and relevant external and internal data.

**Why Change?** Understanding the potential benefits of a LMS make it transparent why it is worth the trouble of trying to increase its adoption. LMSs have been proven to be useful to support both teaching and learning in K-12 schools in Canada (Stockless, 2018; Ndlovu & Mostert, 2018). Specifically, Ceylan and Kesici (2017) have demonstrated that LMSs used for blended-learning can have a significant impact on academic achievement amongst K-12 students. Benefits of LMSs with K-12 schools in Canada are far reaching and include making learning resources and activities readily available, collaborative activities, and the ability to create social, cognitive, and teaching presences (Stockless, 2018; Ndlovu & Mostert, 2018). Yapici and Akbayin (2012) found students were able to easily get prepared for the subject and learn the subject faster, were able to complete knowledge checks to test themselves, learn at their own pace, and activities provided led to a more engaging learning experience. LMSs also sharpen study skills by inviting students to interact with: learning materials, quizzes, grades, evaluation, and a wide variety of multimedia features (Gautreau, 2011; Hallam & Hallam, 2009; Martín-Blas & Serrano-Fernández, 2009; Ullmann, 2009; Wang, Doll, Deng, Park, & Yang, 2012). LMSs

also improve communication and collaboration among teachers, students, and parents in K-12 schools (Laho, 2019) and they allow students to communicate with each other and the teacher remotely (Revere & Kovach, 2011). LMSs also provide options for both synchronous and asynchronous forms of learning (De Smet et al., 2012; Hamuy & Galaz, 2010). Due to its responsive design, students can also access their LMS from any smart device including their phones (Bozkurt et al., 2015). LMSs are also a great way for secondary school teachers to collaborate and share resources with colleagues (Pijanowski, 2010). They also capture students' usage and progress in the platform (De Smet et al., 2012; Hamuy & Galaz, 2010; Martín-Blas & Serrano-Fernández, 2009; Wang et al., 2012). Students' digital footprint in the course provides the instructor with feedback to continuously improve the course while also planning differentiating instruction (Martín-Blas & Serrano-Fernández, 2009; Reigeluth et al., 2008). The potential benefits of LMSs across many components of education are expansive.

***Historical overview: History of educational technology and LMSs.*** LMSs originated from Internet being utilized in classrooms (Aslan & Reigeluth 2011). Additionally, Watson and Watson (2007) maintain the LMSs roots can also be traced back to integrated learning systems which move beyond instructional content to provide “management and tracking, personalized instruction and integration across the system” (p. 28). Online learning was first used in 1995 to describe a web-based system which later became the LMS company Blackboard (Singh & Thurman, 2019). Today, there are many LMS companies and LMSs are used to describe a wide variety of educational computer applications (Watson & Watson, 2007). There are also a variety of types of LMSs. LMSs can be open source (e.g. Moodle) (Dobre, 2015), commercial (e.g. Blackboard) (Carvalho, Areal, & Silva, 2011), and cloud based (e.g. Canvas) (Gutierrez-Carreón, Daradoumis, & Jorba, 2015). As much as there are a variety of types of LMSs, there are also

many forms of online learning (Singh & Thurman, 2019). From my professional experience, the term online learning is often used as an umbrella to refer to many types of digital learning but can be classified into two main delivery approaches—blended learning and fully online learning. Blended learning is often described as face-to-face instruction with components of online learning; whereas, fully online learning often refers to independent online learning with no in-person interactions between the student and the instructor (Singh & Thurman, 2019). In this change initiative, Academy X has selected the cloud based LMS company D2L and plans to undergo this change beginning with a blended learning delivery approach.

***Key organizational theories & recent literature.*** To effectively increase LMSs adoption, several adoption theories will be utilized. Adoption theories study the decisions an individual makes to determine if the individual will ultimately accept or reject a form of technology (Straub, 2009). Straub (2009) maintains the three prominent adoption theories are Diffusion of Innovations (DoI), Concerns Based Adoption Model (CBAM), and Technology Acceptance Model (TAM). Applying these adoption theories together will serve to increase LMS adoption.

*Diffusion of Innovations.* The concept of DoI first originated in Roger's 1962 book entitled "Diffusion of Innovations" where research on diffusion studies were synthesized to describe how a product (e.g. seed) spreads throughout a population (Rogers, 1962). In Roger's most recent edition, DoI explains transitions to how an innovation/idea spreads throughout an organization and offers five different adopter levels including innovators, early adopters, early majority, late adopters, and laggards (Rogers, 2003). Several studies in the past have discussed DoI theory in relation to LMS adoption (Lyytinen & Damsgaard, 2001; Samarawickrema & Stacey, 2007). Lyytinen and Damsgarrd (2001) cautions researchers to carefully apply DoI theories with multiple levels of analysis (e.g. seek to understand the complexities of technology,

stakeholders, etc.). Importantly, this study suggests that researchers can easily fall victim to over simplifying DoI and only through applying these theoretical guidelines can they ensure they generate accurate accounts of diffusion of complex technologies. Samarawickrema and Stacey (2007) analyze the data they collected from adopting web-based teaching and learning in higher education with DoI. This study calls attention to the importance of creating safe adoption environments and provides organizations with next steps they can take to construct safe and encouraging environments conducive for LMS adoption. However, a question that needs to be asked is whether creating similar safe environments could be replicated in K-12 contexts? Although this study and most other studies take place in higher education contexts, limited research has been conducted in K-12 environments which this endeavour plans to undertake.

*Concerns Based Adoption Model.* CBAM first originated with Hall, Wallace, and Dossett's (1973) research entitled "A Developmental Conceptualization of the Adoption Process Within Educational Institutions" that viewed an innovation's adoption within an educational organization as a developmental process. The more the level of concern is reduced by the leader the higher the level of adoption is expected from the team members (Hall et. al., 1973). In later research, Hall (1979) categorizes the feelings of individuals in relation to change based upon their Stages of Concern (SoC) (Hall, 1979). The CBAM provides strategies for leaders to follow to tailor their intervention techniques to individuals based upon their assessed SoC (Hall, 1979). These strategies will be utilized to effectively address stakeholders' varying SoCs. Lochner, Conrad, and Graham, (2015) has in the past utilized the CBAM to uncover secondary teacher's SoC with adopting a LMS. This study was significant in that it allowed the researchers to identify teacher's levels of concern to then tailor appropriate intervention methods to effectively address the concern. Additionally, it also noted that to ensure successful LMS adoption,



educators' earlier concerns need to be swiftly addressed when they arise. Although this study did in fact take place in a K-12 environment, these findings would have been more applicable if this study took place within Canada instead of in the United States.

*Technology Acceptance Model.* TAM originated in 1989 by Fred Davis in his article "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology" which centered on offering ways to predict user acceptance of computers (Davis, 1989). Perceived Usefulness (PU) and Perceived Ease of Use (PEU) were hypothesized to be important variables in determining users' acceptance of computers (Davis, 1989). Over time, this model has been leveraged in many studies and applied to better understand the acceptance of a variety of forms of educational technology. Several studies in the recent past have leveraged the TAM to increase LMS adoption. For instance, Wichadee (2015) found PU of LMS use and PEU had a large impact on their attitude toward implementing a LMS. This study showcases the correlation between PU and PEU and LMS adoption. Although this connection was clear, this approach fails to consider why there was no correlation between attitude and LMS use.

**PoP: PESTE analysis.** As much as the previous PESTE analysis can be utilized to understanding the organizational context, it can also be leveraged to anticipate Academy X's preparedness for this change initiative (Cawsey et al., 2016). Collectively, these factors will bring to light components that will advance or impede increasing LMS adoption.

Recent political announcements have been in support of online learning. According to Wassenberg (2019) the provincial government announced a mandate that beginning in 2020 four out of 30 high school credits must be taken as online courses (Wassenberg, 2019). To meet the mandate of the provincial government, increasing LMS adoption is pertinent. Although the Progressive Conservatives are presently driving this forward, this initiative is not without

resistance. The New Democrat Party and the Ontario Student Trustees' Association are both against this provincial mandate (Rushowy, 2019). If political tides change in the next Ontario provincial election in 2022, it is likely that this mandate could change with it, reducing the motivation to increase LMS adoption.

The expense of our LMS is an economic factor that could also hinder this change initiative. D2L our selected LMS has an annual licencing fee. Even though this fee is nominal, and our funding streams have been flowing strong, there are undoubtable many expenses that go into operating a MIS. Academy X's LMS licencing fee will always be in competition for resources with departments across the organization.

Socially, Indigenous leaders are often polarized when discussing the intersection between technology and traditional resources. Some elders in the community feel it is a great way for their knowledges to reach a larger audience, while others feel it threatens the sacredness of their knowledges and traditions. In navigating these murky waters, it is important to always consult a local Indigenous knowledge keeper to learn which resources are sacred and how resources should be appropriately utilized (Hogan, McCracken & Eldinger, 2019). If Indigenous knowledges are carefully respected and properly implemented, these concerns can be minimized increasing the demand of this change.

Technological is another variable that can also have an impact on LMS adoption. D2L on a monthly basis automates a continuous delivery of software updates/improvement to the platform (What is Continuous Delivery?, 2018). Enhancements to the LMS will likely result in increased usage. According to D2L Brightspace for Schools – D2L Inc. (2019) the company has recently won a Codie for being the “Best K-12 Learning Management Solution.” Awards such as this reaffirm D2L as our LMS vendor; however, if competitor companies offer new and exciting

solutions that render D2L obsolete, Academy X may become motivated to transition to a competitor LMS solution.

Reducing our environmental footprint is a priority across the organization and the community. Increasing our digital footprint will reduce our ecological footprint which is a motivating factor for LMS adoption. D2L has the potential to transform the school to a paperless organization. As more and more resources become available digitally and more assessments are completed and submitted online our staff and students will reduce its environmental impact.

**Relevant External Data.** External data showcases the urgency for this change. In 2011, 48% of Aboriginal people aged 25 to 64 in Canada had a certificate, diploma or degree from a trade, school, college or university compared to non-Aboriginal counterparts at 65% (Statistics Canada, 2011). Additionally, First Nations, Metis, and Inuit were more likely to have completed programs below the bachelor's level and 33% of First Nations, 21% of Metis and 49% of Inuit people aged 25 to 64 did not have a certificate, diploma or degree compared to 12% of the non-Aboriginal population (Statistics Canada, 2011). Indigenous students from the local reserve are at-risk of perpetuating this gap. This unfortunate reality is reaffirmed by Deloitte (2018) stating "The communities are currently experiencing low levels of high school graduation rates that cannot continue and it is imperative that language, history and culture be preserved and revitalized" (p. 7). In a recent report on Indigenous students published by the neighbouring local public-school board in the 2017-2018 school year: 55% of grade 9 students had 8 credits, 23% of grade 10 students had 16 credits, 29% of grade 11 students had 24 credits, and 40% of grade 12 students had 30 credits. This limited credit accumulation will result in Indigenous students not graduating on time or worse not at all. These statistics illuminate the resolve for Academy X to utilize LMSs as a vehicle to increase educational achievement for Indigenous students.

**Relevant Internal Data.** Although Academy X is still in its infancy stage, initial data collection suggest it has started off in the right direction. Academy X has maintained steady enrollment growth since its inception (College X Annual Report, 2017-18). Additionally, in its inaugural year, 91.95% of the possible eight credits that students could achieve were earned compared to 55% of students from the local school board (College X Annual Report, 2017-18; School Board X Education Services Agreement for [Indigenous] Students, 2017-18). As the school continues to scale, Academy X hopes its success continue to scale along with it.

**Leadership position, lens, PoP and framing the PoP summary.** This former section began with the leadership position and lens statement. The scope of my influence as a LMS Consultant/Teacher were discussed. Upon reflection my leadership style was described as leadership as a gardener. To drive this change forward, the adaptive and situational leadership approach were introduced. The theoretical lens this OIP is viewed through is the Indigenous worldview. The leadership PoP began with a broad discussion, and then situated the PoP in the context of Academy X arriving at a succinct PoP statement. The PoP was then framed to showcase why it is important to change. To provide additional context a historical overview of LMSs was provided. To situate this OIP in the existing body of research, pertinent organizational theories and recent literature was reviewed. Finally, this section concluded with a PESTE analysis of PoP followed by relevant internal and external data. Now that the PoP is framed, a deeper dive into the guiding questions related to the problem can now be explored.

### **Guiding Questions Emerging from the PoP**

As this PoP is delved into, the intricate complexities of increasing LMS adoption become apparent. To illuminate the complexities of this PoP and begin to work toward generating viable solutions, the following will be discussed: lines of inquiry that stem from the problem, factors that contribute to the main problem, and emerging challenges.

**Lines of inquiry stemming from the main problem.** The first question that stems from the main problem is how will staff members learn the technical skills needed to use the LMS? To gain technical proficiency, training materials will be created and delivered to staff members following andragogical principles. Another question to consider is how will support be tailored to staff members different needs? Some staff may require minimal assistance whereas other staff members may need an abundant amount of support. Existing support resources created by D2L will be differentiated to staff members based upon the situational leadership approach. An important inquiry to also consider is how can the LMS be adopted consistently across the organization and what tools in the platform are most essential for staff members to utilize? D2L's LMS is robust and can easily overwhelm staff. To ensure this change is realistic, consistent, and ultimately that Academy X is fulfilling its requirements as a MIS, the MoE's Private Schools Policy and Procedures Manual (2013) Teacher Preparation for Classroom Inspection resource will be utilized to determine which instructor tools are most essential for staff members to begin adopting. Another important question that stems from the main problem is why are some teachers reluctant to use a LMS and others are not? DoI, CBAM, and TAM are all adoption theories that will be utilized to understand why individuals accept or reject a technology. Lastly, to ensure the Two-Eyed Seeing approach is reflected throughout this change, a final important question to consider is how is this change initiative contributing to decolonizing the educational experiences of all students? To effectively decolonize education, Munroe et al. (2013) advocates for appreciating multiple perspectives, valuing local knowledges, and adopting a co-learning philosophy.

**Factors that contribute to the main problem.** Teachers are not leveraging the tools available in the LMS. According to Stockless (2018) "In reality, teachers use the pedagogical

functions [of LMSs] at their disposal only rarely, if at all” (p. 1103). Another factor is, already there are high demands placed upon teachers. Seferoglu (2014) conducted a study of 163 teachers that are also involved with information communication technology and determined the teaching profession currently has high levels of burnout which has been largely attributed to the teaching profession being “excessively demanding...and leads one to suffer from emotional burnout” (p. 350). Teachers being informed they must learn and then utilize a LMS in their classes has the potential to be the final straw that breaks their backs. Positioning the LMS as a tool that will initially require a small amount of effort in exchange for more efficient workflows and less work in the future will be critical! For instance, creating a quiz in the LMS takes time; however, once created, saves teachers time and effort because it is automatically graded.

**Challenges emerging from the main problem.** If LMS adoption continues to not be equally adopted across the school, there will be lack of consistency across courses for students and parents/guardians. Involvement of parents/guardians in their child’s education is well known to be associated with higher levels of student success (Gutman & McLoyd, 2000) but, if these tools are not regularly and consistently updated by teachers, parents may lose interest in auditing their child’s progress missing out on important information. This also presumes all parents/guardians will have access to internet at home to login to view their child’s progress. Additionally, if Academy X does not also adopt a LMS effectively it may be at-risk of not be fulfilling its obligations as a MIS—placing the school’s future operation in jeopardy. Lastly, Academy X intends to flag students at-risk throughout the semester using a Final Grade data set in the platform that shows each students’ current grades in all their classes in the school (About Advanced Data Sets, 2019) but this report is only effective if teachers’ consistently input grades into the platform. Now that the guiding questions emerging from the PoP have been identified,

forming a leadership-focused vision for change for Academy X to navigate its way through the minefield of potential challenges along its path towards LMS adoption is paramount.

### **Leadership-Focused Vision for Change**

The leadership-focused vision for change provides direction. To begin to develop solutions to the PoP, the leadership-focused vision for change is comprised of identifying the gap between the current and envisioned state, mapping out priorities for change, and identifying key change drivers whom will play pivotal roles in the change initiative.

**Current organizational state.** Although Academy X was founded with technology identified as being a priority, in the first half of its inaugural year in 2017 it had made minimal efforts to implement a LMS across the school. Google Classroom was initially encouraged by administrators because it is open source. Google Classroom is a LMS that allows educators to create their own online classes, collect digital assignments, and evaluate students. Administrators only direction and expectations for staff was to try to incorporate the LMS where applicable in their respective courses. No formal training or support resources were provided to staff. In a short period of time there was a lot of inconsistencies across the school. Some teachers used Google Classroom a lot, and some decided to not use the LMS at all. When I joined in December 2017, I began to lead this change initiative and take our first steps with transitioning from Google Classroom to D2L. D2L was selected as Academy X's LMS for its pedagogical tools, to more effectively satisfy its requirements as a MIS, and the MoE selected D2L as the preferred LMS for the province of Ontario. In the current state, Academy X will begin this change with transitioning from Google Classroom to D2L across the school.

**Envisioned organizational state.** The optimal vision for change would be the LMS is successfully implemented and adopted across Academy X. To ensure consistency, essential instructor tools need to be determined, communicated, and then regularly utilized by staff. As the

LMS is adopted consistently throughout the organization, Academy X is poised to not only more effectively satisfy its MIS requirements but can reap the promised potential benefits of LMSs. It is Academy X's hope that these positive impacts will also contribute to continue to raise the low level of credit accumulation amongst Indigenous students. For this change initiative to be successful, it will require the collective effort of all stakeholders.

**Priorities for change.** First and foremost, senior leadership needs to be behind this change initiative. As discussed, it is the steering committee's responsibility to approve school initiatives. Without their endorsement, there is no LMS to worry about adopting. The second priority of change is school administrators need to become champions behind this change initiative. This can include but is not limited to allocating time for LMS training during the school's orientation week and ongoing staff meetings. The third priority for change is to ensure faculty training and supports are in place for staff members when they require assistance. Leveraging a LMS without any previous experience can be a daunting task for teachers. There is a technical learning curve and staff members already have little if any free-time available. Resources must be collected and where needed created and ready for use to ensure when an inquiry arises it is swiftly given attention. The final important priority for change is to engage the Indigenous community. To effectively work towards decolonizing education, Munroe et al. (2013) argues "curriculum rooted in community knowledge that connects the local to the global" (p. 327). Academy X was founded on the idea that it is meant to serve the needs of the local Indigenous community and to effectively serve the needs of our students the community must play an integral role within this change. Cawsey et al. (2016) maintains to increase the likelihood of the change being successful, change leaders must make sense of all stakeholders' positions within the change initiative. Without the community's support the school would cease to exist,



and same result should be expected for this change initiative. As this PoP continues to be explored, opportunities to engage elders, knowledge keepers, and parents/guardians from the community needs to be actively sought after.

**Change drivers: administrators, teachers, students, parents/guardians.** For this change to effectively transition to its desired state, administrators, teachers, students, and parents/guardians must all do their part to bring this change to fruition. Each stakeholder will engage with the LMS in a different manner, and each stakeholder's experience within the LMS will have a domino effect on other stakeholders' experiences. Cawsey et al. (2016) maintains change leaders must carefully understand stakeholders' vantage points and their expected role in the change. As discussed, administrators such as the Principal and Vice-Principal need to be champions for this change initiative by endorsing the change and allocating time for staff to receive LMS support as needed. Teachers will be encouraged take on a creation role within the LMS. It is their responsibility to utilize the instructor tools in D2L's LMS (e.g. create a quizzes). Students will be expected to take on a participate role within the LMS. It is their responsibility to engage with all the learning activities that the teachers have created for them (e.g. participate in a quiz). Parents will be asked to take on a view/audit role. It is their responsibility to view the results of their child (e.g. view grades). Collectively administrators, teachers, students, and parents/guardians will work together to transition Academy X to its envisioned state. Now that the pathway toward adoption is paved, before embarking on this journey Academy X needs to first assess and evaluate its organizational change readiness.

### **Organizational Change Readiness**

Academy X should only undergo this change if the organization is primed to take on the initiative. Organizational change readiness is advanced when employees can see how the existing ways of doing things are in the way of better outcomes (Cawsey et al., 2016). In this final

section, the organizational change readiness of the organization will be assessed using a readiness-for-change questionnaire (Cawsey et al., 2016). Afterwards, competing internal and external forces that shape the change will be discussed.

**Assessing organizational change readiness.** Is Academy X ready to change? According to Cawsey et al. (2016) organizational change readiness is based upon previous change experiences, executive support, openness to change, rewards to change, and measures for change and accountability. To assess Academy X's readiness for change the organization will be analyzed across each of these six dimensions to determine promoting and inhibiting change factors. Overall, Academy X's change readiness rate will be determined based upon how it satisfies the criteria.

**Previous change experiences.** The first category previous change experiences focuses on an organization's past experiences, failures, moods, and current stance with change (Cawsey et al., 2016). In the past, Academy X has had initial success with change not only meeting but exceeding its enrollment targets in its early years. Although Academy X has had its setbacks like any organization, it hasn't faced previous failures with change. Academy X also presently has a very exciting atmosphere as staff regularly express their passion for all having a rare opportunity to be part of this innovative school model. Academy X has undergone several large scale changes in a short period of time making it at-risk of change cynicism; however, in light of the staff's overall enthusiasm for the potential of the school it would be inaccurate to describe the mood in Academy X as negative or cynical. Since enrollment has been consistently increasing and the school plans to expand its staff, Academy X has not shown any signs of slowing down. Academy X's previous change experiences collectively indicate it is ready for change.

***Executive support.*** In addition to previous change experiences, executive support is another important factor in determining an organization's readiness for change. According to Cawsey et al., (2016) executive support encapsulates senior managers sponsorship of the change, the clarity of the vision, executive success, and leadership's lack of support. Although Academy X's senior leadership may not have a saturated understanding of the LMS, it has demonstrated its support for the change by investing both financial resources and human capital in bringing this change forward. Academy X has made a lot of refinements to their mission and vision within their first few years of operation and what pathways Academy X will provide its students (workplace, college, or university pathways) is still highly debated amongst leadership. LMS adoption is aligned with the student success team's goal of increasing students' credit accumulation. Academy X's leadership has had difficulty in the past with approving opportunities because its steering committee was unable to render timely decisions or Academy X has not had the human capital required to bring opportunities to fruition. After analyzing Academy X's executive support, it has found both promoting and inhibiting factors for change.

***Credible leadership and change champions.*** Aside from executive support, credible leadership and change champions is another vital factor in predicting organizational change readiness. According to Cawsey et al. (2016) credible leadership and change champions refers to trusting the leaders, using their credibility to achieve team objectives, the organization's ability to attract and retain talent, managers ability to connect senior leadership to the rest of the organization, and if senior leadership views change as needed for the organization. The CEO of the organization is immensely respected with the community and the organization and has recently been awarded with a prestigious national award. Senior leadership has recently finished engaging in an organization restructuring and at the tail end of this process has carefully taken

time to communicate to staff what the organizations objectives are and how they will be achieved. Due to present political hiring restraints against Ontario Teachers (Regulation 274), Academy X is in a prime position to attract new talent by offering attractive annual contracts to teachers which public schools cannot do without conditions. Administrators regularly report to a steering committee on a monthly basis to inform senior leadership on what is happening within the ground level of the organization. Senior leadership has also expressed interest in leveraging the successful usage of the high school to similarly increase LMS adoption with the college. Additionally, senior leadership has expressed utilizing the LMS as a vehicle to reach a larger audience of learners and to preserve and share Indigenous language and culture with wider audiences. Considering Academy X's many positive examples of executive support, this category suggests it is in an optimal state to undergo change.

*Openness to change.* As much as executive support is essential, the organization will not be ready for change if it isn't open to change. Openness to change is the largest criteria in determining organizations' change readiness. According to Cawsey et al., (2016) openness to change is monitoring the environment, scanning, identifying root causes, turf protection, past strategies, airing grievances, confronting conflicts, innovative culture, multidirectional communication channels, support of employees, and ensuring there is enough energy and support. Academy X is presently scanning the environment by examining Indigenous students' success in annual reports issued by the local school board. Within staff meetings, teachers are invited to participate in annual analysis applied to the organization. Academy X has refined how students' enrolment applications are reviewed and granted acceptance into the school. Unfortunately, several staff members within College X of the organization are very territorial and their turf is reinforced by senior leadership. Senior leadership's investment in hiring an

external consultancy to conduct an organizational review showcases they are open to new ideas and not locked into previous strategies. Leading up to monthly staff meetings, employees are invited to add to the agenda or voice their concerns over previous decisions or new policies. When conflict has occurred in the past it is often addressed openly in a team meeting or in the form of a restorative justice circle and arriving at a resolution always remains the goal of these conversations. Despite these conversations, a human resource (HR) department has yet to be formed resulting in conflicts not being addressed head-on and are often smoothed over. Academy X has been able to form meaningful partnerships with private technology companies to foster innovation within the school. Academy X has multidirectional levels of communication within the high school, but College X is insistent on unidirectional communication channels through the organization's hierarchy. From an employee perspective, the change is viewed as appropriate and needed because it is aligned to the organizational objectives. Finally, since teachers are already spread very thin coupled with LMS adoption being a daunting task, it will likely persistently be a struggle to equip staff with enough training, support, and resources to see the change forward. Both promoting and inhibiting factors were uncovered in the openness to change category suggesting Academy X is ready for change; however, it also has areas for improvement.

***Rewards for change.*** In addition to openness to change, rewards for change is another variable in assessing organizational change readiness. According to Cawsey et al. (2016) rewards for change impact organizational change readiness by studying if the organization rewards innovations, focuses on short-term goals, and values attempting a change even if the result ends in failure. Academy X regularly rewards innovations by showing to the community how the school is redesigning education. Academy X focuses on not just short-term results but sets yearly goals and senior leadership completes 5-year vision exercises. Experimenting with educational

technology is widely endorsed but existing procedures and practices coupled with an overcautiousness to safeguard the resources are barriers to accessing technology and increasing innovation. After analyzing rewards for change, both variables for and against change have again emerged indicating both change readiness and important next steps.

***Measures for change and accountability.*** The remaining criteria for organizational change readiness are measuring for change and accountability. This variable is concerned with tracking progress, capitalizing on data, evaluating customer satisfaction, and meeting deadlines (Cawsey et al., 2016). Academy X sends home annual surveys for stakeholders throughout the year. As discussed, Academy X has a variety of data sets in the LMS at their disposal. Internal discussions of capturing more parent/guardians, and students' level of satisfaction has been discussed but has not been sent out yet to stakeholders. Finally, resource requests have been collected in the past and then carefully are prioritized by senior leadership. Based upon the analysis of measures for change and accountability, Academy X is tilted in favour of change readiness but still has an opportunity for enhanced readiness.

***Evaluating organizational change readiness.*** After compiling all change readiness categories analyses, overall Academy X has a high rate of change readiness. Academy X categories most in favour of change readiness are credible leadership and change champions. Some areas of improvement that also emerged are having a clear future, management previously demonstrating lack of support, territorial staff members, previous conflicts being smoothed over, unidirectional communication channels, lack of resources, barriers to experimenting with technology, and not measuring stakeholder satisfaction. Solutions to these identified areas will be discussed in Chapter 2. Despite these opportunities for improvement, Academy X's change readiness overall indicates it is ready to undertake change.

**Competing internal and external forces shaping change.** In addition to analyzing Academy X across the previous readiness dimensions, both external and internal forces that shape change and will impact Academy X's change readiness are important to consider. According to Cawsey et al. (2016) a force field analysis identifies both forces for and against a change. Examples of external and internal driving factors are trends in K-12 to transition toward more online/blended-learning, a heightened awareness to better Indigenize the curriculum, the perceived benefits of LMSs, and potential increased student achievement. Examples of external and internal restraining factors are staff training and supports, teachers limited availability, turnover, and weariness of all the potential drawbacks previously discussed. Although there are many competing forces for this change, driving factors overpower the restraining forces.

**Conclusion.** This section began with guiding questions emerging from the PoP. In this segment, lines of inquiry, contributing factors, and challenges that contribute to the main problem were all considered. Afterwards, the leadership focused vision for change distinguished Academy X's current state from its envisioned state and listed priorities for change. Lastly, the important role change drivers will play was discussed. The final section completed an organizational readiness-for-change analysis. Albeit areas of improvement we identified; overall Academy X is ready for change. With the introduction and problem being outlined, this OIP will now transition to begin to make considerations related to planning and development.

## Chapter 2: Planning and Development

Now that the problem and the context have been identified, the planning and development phase will be outlined in the OIP. In Chapter 2 a framework for leading the change process, leadership approaches to change, a critical organizational analysis, possible solutions to address the PoP, and finally leadership ethics and organizational change will be discussed.

### Conceptual Framework

To guide this OIP, a conceptual framework will be utilized. Conceptual frameworks are invaluable in research because they ground the research in applicable knowledge bases, provide a map for the researcher to follow, and enhance the rigor of the research (Adom et al., 2018; Rocco & Plakhotnik, 2009). Conceptual frameworks can be derived from a variety of sources including experiential knowledge, existing theory and research, pilot or exploratory research, and thought experiments (Maxwell, 2013). All these domains have been withdrawn from to construct a conceptual framework for this OIP. In Chapter 1, the Indigenous worldview was discussed as the theoretical framework this research is viewed through, the PoP has been situated in the context of Academy X, and administrators, teachers, students, and parents/guardians will all collectively serve as change drivers. In Chapter 2, the conceptual framework will continue as the three prominent adoption theories (DoI, CBAM and TAM) will be leveraged to increase LMS adoption. Finally, adaptive leadership with components of situational leadership will be utilized to drive this change forward. Types of organizational change and relevant framing theories in relation to the PoP will first be analyzed.

**Types of organizational change.** Knowing the type of change is as important as knowing how to change. According to Cawsey et al. (2016) organizations need to know not only what they need to change, but then how to change. To understand what needs to change,



increasing LMS adoption needs to be classified into its appropriate type of organizational change. Cawsey et al. (2016) maintains change can be discontinuous (sudden) or continuous (gradual) and proactive (in anticipation) or reactive (in response to external events). From my former professional experience as a LMS Training Specialist, I have worked with numerous organizations worldwide who are undergoing LMS adoption, and I have never observed a single organization achieve adoption immediately, instead adoption takes time. Additionally, a central reason why Academy X decided to take on this change was to reap the perceived benefits of online learning. Therefore, this change will be classified as being incremental and anticipatory.

**Relevant framing theories.** Now that the organizational type of change is transparent, Academy X can determine how to change. Cawsey et al. (2016) suggests Tuning is the most appropriate category of change to address this type of organizational change. Following this method, Academy X is encouraged to make incremental changes to the plan, ensure internal alignment, pay attention to individual components or subsystems, utilize a middle-management role, and the major task will be implementation (Cawsey et al., 2016). This method will be incorporated into the solutions discussed later in this Chapter and these strategies will be collectively utilized throughout the change process.

**Framework for leading the process of organizational change.** In addition to identifying the type of organizational change, selecting a relevant framing theory immensely aids in knowing how to change. Cawsey et al., (2016) summarizes numerous frameworks for leading the change process; however, after a close examination of these models, the change path model emerges as the best model to successfully navigate through this change. Although the change path model is a relatively new change model, it incorporates many elements of established change models (Lewin's Stage Theory of Change, Kotter's Stage Model of Organizational

Change, Gentile's Giving Voice to Values, Duck's Emotional Transitions Through Change, and Beckhard and Harris's Managing the Change Process) (Cawsey et al., 2016). Compared to other models, there is more detail and direction than Lewin's Stage Theory of Change and less prescriptive than Kotter's Eight-Stage Process (Cawsey et al., 2016). The change path model was also selected because it acknowledges that change is rarely linear, instead change is an ongoing process, and the intensity of the change will be based on a given situation—an essential outlook to effectively address this PoP (Cawsey et al., 2016). Moreover, the change path model also aligns with the Indigenous worldview (valuing the best of both mainstream and Indigenous ways of knowing) (Munroe et al., 2013) as the change path model combines the best of both process and prescription (Cawsey et al., 2016). Each stage of the change path model will be summarized in this section and then its components will be transitioned through in the implementation, communication, and evaluation sections in Chapter 3.

***Awakening.*** The Awakening stage first “begins with a Critical Organizational Analysis” (Cawsey et al., 2016, p. 87). This stage will be utilized in the change implementation plan and the plan to communicate change. In the change implementation plan, the change leader will conduct an analysis by validating the change as both a problem and an opportunity through utilizing external and internal data. External data will include previous studies and client success stories. Internal data will include survey feedback collected from staff. In the plan to communicate the change, the change leader will convince senior leadership that the change is warranted through spreading awareness of the existing gaps and developing a powerful vision for change. Through the Indigenous lens, the awakening stage will analyze opportunities and ensure the change message is communicated in a manner that explicitly values Two-Eyed-Seeing.

***Mobilization.*** This next stage Mobilization is defined as “what specifically needs to change and the vision for change are further developed and solidified by additional analyses and by engaging others in discussions concerning what needs to change” (Cawsey et al., 2016, p. 87). This stage will be utilized in the change implementation plan and the plan to communicate change. In the change implementation plan, the change leader can interpret the change through formal structures and systems, assess power and cultural dynamics, and begin to manage various stakeholders’ reactions to change (positive, negative, ambivalent). In the plan for communicating change, the change leader will focus on communicating the need for change throughout the entire organization. To continue to adopt the Indigenous worldview, the need for change will be framed as an effort to use technology to pay tribute to the past.

***Acceleration.*** The next stage Acceleration is the “development and activation of a detailed plan for action” (Cawsey et al., 2016, p. 88). This stage will be utilized in the change process monitoring and evaluation section and the plan to communicate change. In the monitoring and evaluation section, the leader will begin to provide staff with the new knowledge and skills required for the change through training and ongoing support and will also leverage appropriate tools such as responsibility charting and to-do-lists to consolidate progress. In the plan to communicate change, supporting the development of new understandings will be the primary focus which will be achieved through celebrating the achievement of small wins and milestones. As new tools in the platform are utilized, to maintain the Indigenous perspective traditional knowledges and resources will likewise be leveraged to further accelerate the change.

***Institutionalization.*** Lastly, this final stage refers to “the successful conclusion of the transition to the desired new state” (Cawsey et al., 2016, p. 88). This stage will be utilized in the change process monitoring and evaluation section and the plan to communicate change. In the

change process monitoring and evaluation stage, the leader will center on tracking progress (e.g. balanced scorecard, D2L's data sets, course audits) and developing new structures, processes, and skills through familiarizing staff with new workflows. In the plan to communicate change, the leader will communicate the results of the change and aid in developing new stability throughout the organization by expressing final evaluations and next steps. According to Cawsey et al., (2016) "Change management is not something you simply deal with, then can ignore. Rather, it is a continuing process of seeking to understand what is going on and what is needed" (p. 375). To not lose sight of the Indigenous perspective, courses that are identified as having Indigenous content gaps will be filled with valuable Indigenous resources. After the institutionalization stage is completed, Academy X will remain in a steadfast position by continuing to identify remaining gaps that need to be filled to finalize the change.

Collectively, the change path model provides a framework for the change leader to follow to increase LMS adoption. The awakening stage will analyze information to build support for this initiative. The mobilization stage will identify what needs to change. The acceleration stage will focus on developing and implementing the plan for change. Finally, the institutionalization stage will identify remaining steps needed to fully transition Academy X to its envisioned state. As much as a framework for leading the change process is important, identifying the best leadership approach to change is also critical.

### **Leadership Approach to Change**

As discussed in Chapter 1, adaptive leadership will be leveraged as the central leadership approach complimented with components of situational leadership. The combined efforts of these leadership approaches will propel LMS adoption from its current to its envisioned organizational state.

**Adaptive leadership.** Heifetz et al. (2009) suggest Adaptive Leadership is “the practice of mobilizing people to tackle tough challenges and thrive” (p. 14) and the goal of adaptive leadership is to enable the capacity to thrive, build upon past initiatives, embrace experimentation, relying on diversity, and ultimately will take time (Heifetz et al., 2009). This leadership approach compliments the Two-Eyed Seeing approach as it likewise advocated for valuing multiple perspectives (Munroe et al., 2013). Situational challenges, leader’s behaviours, and adaptive work are all components of adaptive leadership that will be utilized to drive this change initiative forward. Please see adaptive leadership model in Figure 2.

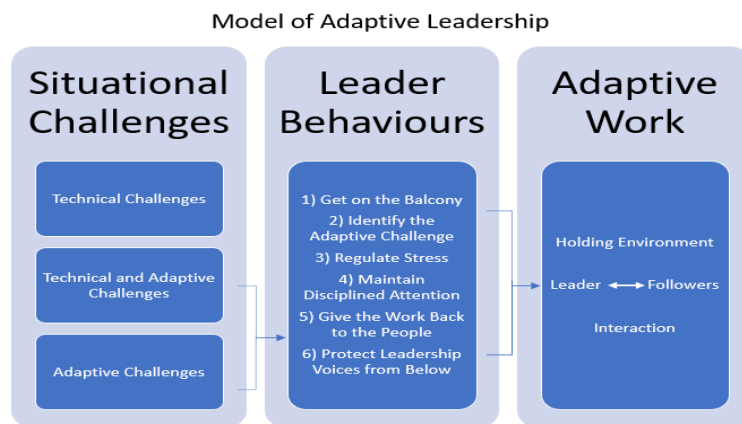


Figure 2. Model of Adaptive Leadership. Adapted from “Leadership: Theory and Practice,” by P. Northouse, 2016, p. 261. Copyright 2008 by Sage.

**Situational challenges.** In leading a change initiative forward, situational challenges must be addressed. The three main types of situational challenges are: technical challenges, technical and adaptive challenges, and adaptive challenges (Heifetz et al., 2009). To effectively prepare to address all situational challenges each will be discussed.

**Technical challenges.** Technical challenges are “very complex and critically important...[that] have known solutions that can be implemented by current know-how” (Heifetz et al., 2009, p. 19). In increasing LMS adoption, examples of technical issues may include a tool in the LMS not working as intended or staff members experiencing frustration with not knowing

how to use a tool. To address technical challenges, D2Ls pre-existing support channels can be leveraged to resolve technical issues.

*Technical and adaptive challenges.* Technical and adaptive challenges are defined as “problems do not always come neatly packaged as either ‘technical’ or ‘adaptive.’ When you take on a new challenge at work, it does not arrive with a big *T* or *A* stamped on it. Most problems come mixed, with the technical and adaptive elements intertwined” (Heifetz et al., 2009, p. 19). Examples of technical and adaptive challenges when adopting a LMS may include collecting student data, improving communication with parents/guardians, or students’ access to course learning resources. In confronting technical and adaptive challenges, Heifetz et al., (2009) states a leader can perform the work of adaptive leadership by helping individuals, organizations, and communities deal with tough questions, distinguish from what must be conserved and discarded, and then innovate to foster organizational adaptability. Adaptive leadership emerges as pertinent leadership approach to effectively address and overcome challenges related to this change that are intertwined with technical and adaptive components.

*Adaptive challenges.* According to Heifetz et al. (2009) Adaptive challenges “can only be addressed through changes in people’s priorities, beliefs, habits, and loyalties” (p. 19). An example is, how will this initiative change how educators teach in their classrooms or how will educators utilize the platform to adopt the Two-Eyed Seeing approach? Adaptive challenges will be by far the most complex and difficult type of challenges to address. To confront adaptive challenges, leaders must define challenging situations, implement solutions, and overall mobilize stakeholders to address the many problems and concerns that arise (Heifetz et al., 2009).

*Leader behaviours.* In addition to situational challenges, to transition Academy X to its envisioned state the following adaptive leadership behaviours will be leveraged: Get on the

Balcony, Identify Adaptive Challenges, Regulate Stress, Maintain Disciplined Attention, Give the Work Back to the People, and Protect Leadership Voices from Below (Heifetz et al., 2009).

*Get on the balcony.* Getting on the balcony encourages the change leader to observe what is going on around them, develop multiple interpretations, look for patterns and then reality test the interpretation formed with stakeholders (Heifetz et al., 2009). To get a big picture perspective of the PoP, the leader at Academy X can get on the balcony by auditing department meetings, completing formal and informal check-ins with staff members.

*Identify adaptive challenges.* To effectively identify adaptive challenges a variety of strategies are useful: identifying the mission of the group facing the adaptive challenge, changing values or priorities, distinguishing between adaptive and technical challenges, relevant parties, conflicts, work avoidance, and the authority and resources are available (Heifetz et al., 2009). If the leader incorrectly diagnoses the problem, they may incorrectly treat the symptoms of the problem instead or may even exacerbate the problem. To effectively identify adaptive challenges at Academy X, leaders must carefully analyze the challenges they observe. For example, if staff members are resistant to change instead of being disappointed, leaders need to unpack reasons for resistance to uncover staff members' adaptive challenges.

*Regulate stress.* Not all stress is bad. A healthy amount can motivate staff; however, an unhealthy amount can demobilize them. Regulating stress encourages the change leader to always have their hand on the thermostat on the room to ensure they are constantly looking for signals to either lower or raise the temperature to a comfortable level that encourages them be motivated but at the same time not too overwhelmed by the change (Heifetz et al., 2009). The change leader in this PoP can help maintain healthy levels of stress by creating a holding environment—a safe place to solve technical and adaptive challenges to bind people together to

form a collaborative culture that is collectively focused on the central goal (Heifetz et al., 2009). A holding environment could be fostered at Academy X by scheduling group and individual meetings or holding office hours where the leader can provide their staff members with support by reclarifying goals, answering questions, and troubleshooting technical issues/questions.

*Maintain disciplined attention.* According to Heifetz et al., (2009) maintaining disciplined attention refers to the leader not avoiding the tough work ahead but instead directly confronting it by addressing any elephants in the room (e.g. staff members feel the LMS is weaker compared to a competitor LMS) and then working together to address it. At Academy X, a leader can maintain disciplined attention by encouraging the staff to have resilience to focus on the tough work ahead. The difficult work facing staff is challenging but must inevitably be addressed and overcome if meaningful change is going to occur.

*Give the work back to the people.* Heifetz et al., (2009) maintains commonly leaders have the tendency to shoulder the difficult work themselves instead of working with team members to share the load and responsibility of the difficult work. Leaders in the PoP can effectively give the work back to the people by sharing the workload with staff by empowering them (when appropriate) to solve problems themselves. For instance, if a teacher has a LMS question where the answer is a matter of preference, the leader could push the question back to the staff member and encourages them to use their professional discretion.

*Protect leadership voices from below.* Heifetz et al. (2009) argues adaptive leaders must encourage all team members regardless of their role to feel comfortable with offering their own critiques and suggestions for improvements of the change initiative. At Academy X the leader must provide an opportunity for all staff members to have a voice regardless of their role (e.g. secretary, EA, teacher etc.). As the leader provides opportunities for all team members to



contribute their ideas, they will not only be poised to benefit from their contributions but also will empower other stakeholders to become engaged in the change initiative.

**Situational leadership.** In addition to adaptive leadership, situational leadership will ensure stakeholders receive tailored amounts of direction and support based upon their levels of need. As much as it is important that stakeholders are given enough direction and support, providing too much direction or support for those that don't need it isn't helpful either. Hersey and Blanchard (1988) argue situational leadership "provides leaders with some understanding of the relationship between an effective style of leadership and the level of readiness of their followers" (p. 170). Situational leadership is applicable for adopting the Two-Eyed Seeing approach because Academy X is fortunate to have staff members who are knowledge experts on Indigenous content; however, there are also a lot of staff members that are attempting to integrate Indigenous content in their courses for the first time. Readiness behavior is "the extent to which the leader engages a two-way or multi-way communication. The behaviors include listening, facilitating, and supportive behaviors" (Hersey & Blanchard, 1988, p 172). Assessing followers' readiness level is the process of determining team members "different combinations of ability and willingness that people bring to each task" (Hersey & Blanchard, 1988, p. 176). After stakeholders' readiness levels have been assessed, the most appropriate leader readiness behavior will be tailored to the follower (delegating, participating, selling, or telling) (Hersey & Blanchard, 1988). Situational leadership will ensure the leadership behaviour is tailored to the staff members readiness behaviour.

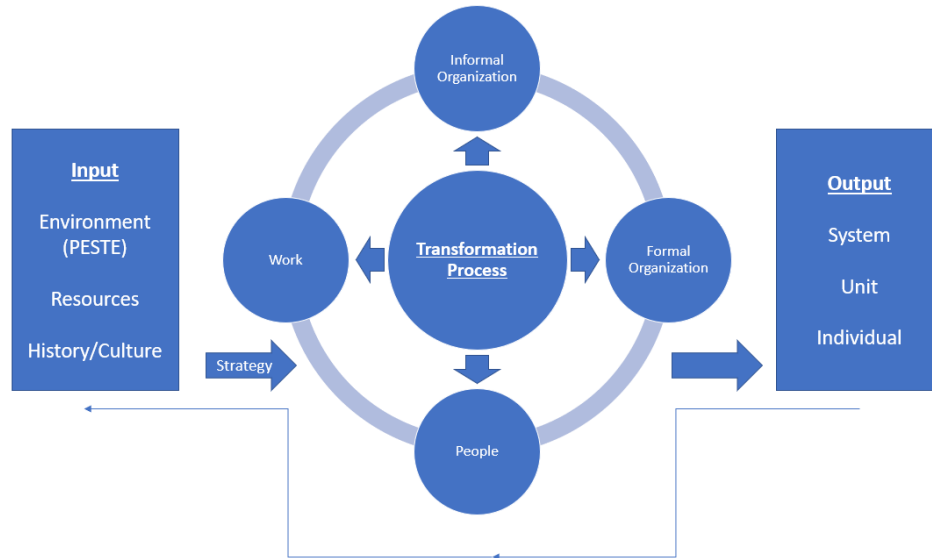
**Leadership approaches and framework for leading change summary.** This section began with discussing the conceptual framework that will guide this OIP. The type of organizational change was then classified as being incremental and anticipatory and the tuning

approach was selected as the relevant framing theory on how to best change. The change path model was selected as the framework for leading the process of organizational change and the adaptive and situational leadership approaches were selected to drive this change initiative forward. In addition to the leadership approach to change determining how to change, a further critical organizational analysis will continue to identify next what else needs to change.

### **Critical Organizational Analysis**

A critical organizational analysis will aid in identifying what needs to change. Nadler and Tushman's Congruence Model is a change path model that will serve as a framework to consolidate previous organizational change readiness findings, organizational analysis, and identify additional gaps that will be addressed with relevant research.

**Nadler and Tushman's Congruence Model.** The tuning approach previously acknowledged the importance of internal alignment. Congruence is a measure of how well pairs of components fit together, and effective organizations have congruence between its environment and its organizational components (Cawsey et al., 2016). Nadler and Tushman's Congruence Model is another form of organizational analysis that examines how an organizations strategy transforms its inputs into outputs to uncover what is needed to change (Nadler and Tushman, 1989). The congruence model stipulates "Effectiveness is greatest when a firm's strategy is consistent with environmental conditions and there is internal consistency, or fit, among the four organizational components" (Nadler and Tushman, 1989, p. 194). To ensure fit, Academy X's inputs, strategy, transformation process, and outputs will each be analyzed. Figure 3 below displays Nadler and Tushman's Congruence Model.



*Figure 3. Nadler and Tushman's Congruence Model. Adapted from "Organizational frame bending" by D. A. Nadler and M. Tushman 1989, Academy of Management Executive, 3, p. 196. Copyright 1989 by Academy of Management Executive.*

**Inputs.** Academy X's first component to be analyzed are its inputs. The inputs are composed of the history, external environmental factors, and resources (Cawsey et al., 2016). The history of an organization provides insights into its present mission, culture, and strategy (Cawsey et al., 2016). As discussed in the former chapter, College X and Academy X were founded to create culturally relevant courses and overall better serve the needs of the Indigenous community. Being mindful of Academy X's history and readily available resources will ensure that as this change moves forward it will remain in alignment with the organization's origins. As discussed, Academy X is fortunate to have a variety of Indigenous knowledge experts; however, many staff members have limited or no experience with incorporating Indigenous content in their courses. The situational leadership approach is pertinent to ensure the change leader's behaviour is tailored to staff members readiness levels (Hersey and Blanchard, 1988). For instance, the telling approach (provide specific instructions and closely supervise performance) is necessary for staff within limited experience; whereas, the delegating approach (turn over responsibility for

decisions and implementation) is appropriate for staff members that are knowledge experts (Hersey & Blanchard, 1988). Leveraging the expertise and sharing the invaluable Indigenous resources already created and collected by these staff members will immensely contribute to adopting the Two-Eyed Seeing approach throughout the school. External environmental factors were discussed in the previous PESTE analysis, and political and social factors emerged as hurdles to be overcome. Although political decisions are outside of Academy X's control, a social factor that can be improved is rebuilding trust and fostering positive relationships with the local Indigenous community. According to Ragoonaden (2017) to accomplish culturally responsive pedagogy, the Indigenous community needs to be an integral partner of the school by inviting them to participate in the school's initiatives. Moreover, Munroe et al. (2013) advocates for empowering students "to become curriculum makers, involving them in bringing the local community context into lessons" (p. 329). To mitigate this social factor and continue to indigenize the curriculum, efforts to develop positive relationships with the community along with providing Indigenous students with opportunities to share their community knowledge will be a continuous priority. Lastly, examples of resources include human, capital, and technological resources (Cawsey et al., 2016). Academy X is very fortunate to have significant human capital at its disposal as each classroom is provided with an EA and a child and youth worker and counsellor are also at the students' disposal. Although we have a lot of support resources, delivering LMS training and ongoing support to all staff members will also require an abundant amount of resources. This was previously identified as an issue in the former organizational readiness assessment. To reduce the strain of human capital needed to provide ongoing training and support, Academy X can leverage open source documentation, community posts, and instructional videos already created by D2L. As also discussed, Academy X is fortunate to

receive three revenue streams but the LMS software has an annual licencing fee which will always be in competition with other departments appetites for monetary resources. To secure future funding for the LMS's annual software licencing fee, the Return on Investment (ROI) methodology can be utilized to showcase to senior leadership both the intangible and financial benefits associated with the LMS (Phillips, 2012). Lastly, Academy X also provides a Chromebook as a technological resource to all its students which allows them to all access the platform. Although providing this device is a great asset in this change initiative, several students do not have access to internet which denies them access to the LMS at home. To minimize the digital divide amongst students who do not have access to the internet, Academy X will leverage its human capital resources of support staff by having them provide paper copies where needed.

**Strategy.** Academy X's inputs impact its strategy. According to Cawsey et al. (2016) leaders must carefully analyze their strategy by asking themselves what the purposes and objectives of the change are in the context of the organization's strategy. The strategy of this change initiative is to increase LMS usage, which will lead to enhanced student outcomes. As expressed in Chapter 1, the strategy of Academy X is "to provide students with the knowledge, abilities and attitudes to create a pathway that enables them to become confident, proficient and skilled leaders of their community and society in general" (School Handbook and Course Calendar, 2019-2020) and it has recently prioritized "mobilizing indigenous knowledges" and "supporting student success" as its goals (School Handbook and Course Calendar, 2019-2020). The strategy of this change initiative aligns with the organizational strategy. Indigenous knowledges can be mobilized by capturing resources in an Indigenous repository within the platform. Munroe et al. (2013) supports this approach stating, "the promises of both Indigenous ways of knowing and 21st century education may benefit all learners" (p. 319). As discussed in

Chapter 1, an inherent adaptive challenge of this change initiative is empowering all staff to strive to Indigenize the curriculum. To embed the Indigenous worldview into the educational experiences for students, the adaptive leadership approach stipulates adaptive challenges can be only overcome by “shedding certain entrenched ways, tolerating losses, and generating the new capacity to thrive anew” (Heifetz et al., 2009, p. 19). Professional development opportunities for staff to unlearn and relearn teaching approaches to decolonize education will result in enhanced educational outcomes for students. Moreover, Data Hub (reporting tool with the LMS) can be utilized to flag students at-risk to improve their student success. Although these priorities are transparent, the former organizational analysis indicated lack of a clear future. Academy X must develop a powerful vision for change to showcase to staff its learning pathways that it intends to offer (e.g. academic, applied, locally developed). To aid in developing a successful vision, the following characteristics should be incorporated clear, memorable, exciting, challenging, excellence centered, stable but flexible, and implementable (Jick, 1993). Maintaining congruence between the change’s strategy and Academy X’s strategy is pertinent throughout the change.

***Transformation Process.*** Academy X’s strategy impacts its transformation process. The transformation process is when the work, formal organization, informal organization, and people all work together to produce the organization’s outputs (Cawsey et al., 2016). In this section, each of these components will be discussed and where applicable remedies with relevant research from the previously introduced prominent adoption theories will be provided.

***Work.*** The first component of the transformation process is work. According to Cawsey et al. (2016) work is the basic tasks by the organization to carry-out the organization’s strategy. Examples of work at Academy X include all day-to-day in-person efforts made from staff members to educate the students (e.g. lessons, assessment, learning activities etc.). According to

Cawsey et al. (2016) change leaders need to carefully consider the changes to key tasks when leading a change initiative. This change initiative would transition Academy X from in-person teaching tasks to blended teaching approaches (e.g. digital lesson plans, grades, and learning activities). To continue to work towards the Two-Eyed Seeing approach, Jacobs (2010) suggests “assessment formats in schools should mirror the products and performances of adults currently working in the various disciplines [e.g. podcasts, websites, blogs etc.]” (p. 325). Following the situational leadership approach, various levels of support will be provided to staff based upon their level of need (Hersey & Blanchard, 1988, p 172). Following the adaptive leadership approach, the change leader can address technical challenges related to work to support staff by leveraging their expertise of the LMS (Heifetz et al., 2009). To increase the likelihood of LMS adoption, these new tasks will be reinforced with Davis’s TAM. As introduced, the TAM was designed to understand how individuals accept and use technology based upon PU and PEU (Davis, 1989). PU is defined as “the degree to which a person believes that using a particular system would enhance his or her job performance” (Davis, 1989, p. 333). The change leader will showcase PU to staff by discussing with them benefits of blended learning, how it can be utilized to more effectively Indigenize the curriculum, how it can better satisfy both its MIS requirements, and overall contribute to enhancing teaching and learning. PEU is defined as “the degree to which a person believes that using a particular system would be effort free” (Davis, 1989, p. 333). To demonstrate PEU, Academy X can strategically showcase in training tools that are simple and user friendly. Demonstrating to staff members that their work will be more effective and easier will propel this change forward.

*The formal organization.* In addition to work, the formal organization is another component of the transformation process. According to Cawsey et al., (2016) the formal

organization is the organizational architecture and is the formal departments within an organization are typically composed of several areas including: human resource management, information systems, and measurement and control systems. The adaptive leadership perspective acknowledges the important role formal structures within an organization can have on impeding or advancing a change initiative “Each structure can enhance, or constrain, an organization’s ability to adapt to changes” (Heifetz et al., 2009, p. 55). Academy X being a relatively new school has established information systems and control systems, but its HR department has yet to be formed. College X’s formal organizational structure requires Academy X to seek the approval of College X to make their decisions, and some staff have formed frustrations with College X because they feel College X is impeding opportunities. According to Cawsey et al., (2016) change leaders must make use of these formal departments to facilitate change. The change leaders can leverage the existing information systems by forming meaningful partnerships with the IT department and can benefit from the already established measurement and control systems by reporting the progress of change initiative to the steering committee. To address the absence of the HR department, the change leader and administrators will fill this gap in the interim by collectively working together to provide training and performance appraisals to staff. The absence of a HR department has also likely resulted in the previous readiness assessment concern of staff members conflicts being smoothed over. To effectively deal with this issue, aside from creating a HR department, management is encouraged to implement the following conflict resolution strategies: openness, exchanging information, examining differences, and searching for solutions (Brewer & Lam, 2009). Moreover, to effectively embrace the Indigenous worldview, inspired by the local Indigenous epistemology of “The Great Law” lessons of living well and having a good mind (Bedford & Workman, 1997) can also be utilized to resolve



conflicts. Finally, two additional concerns previously brought to the surface from the organizational readiness assessment were territorial staff members and unidirectional communication channels. To address both these challenges, College X and Academy X may consider transitioning their organizational structure to a dual operating system. According to Kotter (2014) the dual operating system is an organizational structure that has a hierarchy on one side and network on the other side is where initiatives can be led to capitalize on big opportunities or dodge threats, opposed to being set on management. This revised organizational philosophy will not only serve to address the former needs but will ensure timely opportunities are capitalized upon.

*The informal organization.* Equally important to the formal organization is the informal organization. According to Cawsey et al. (2016) the informal organization are the norms that are accepted and developed over time to establish the organizational culture of how things are done within the organization. The adaptive leadership approach similarly acknowledges the importance of the informal organization by encouraging leaders to “Listen to the Song Beneath the Words” by looking for the implicit signals and messages behind what is being explicitly (Heifetz et al., 2009, p. 76). As mentioned in Chapter 1, the theoretical framework this research is viewed through is the Indigenous worldview and Academy X’s organization culture is centered on practicing the values of the local Indigenous groups (e.g. care, trust, respect etc.). All members of the school are encouraged to work toward practicing these traditional values daily. Due to the limited autonomy of Academy X imposed from College X’s formal organizational structure, it has informally caused Academy X employees to feel that management has shown a lack of support. Recently when opportunities have arisen, Academy X employees were not able to receive a timely decision from College X. Instead of passing on the opportunity, employees

from Academy X agreed to the opportunity—circumventing College X’s approval. A positive aspect of Academy X’s culture is a lot of the staff are motivated to be part of an innovative school and are galvanized to experiment and integrate innovative technology in their classrooms. Roger’s DI’s argues the nature of the social systems is an important variable that impacts the rate of adoption is (Rogers, 1995). Improving these informal organization is pertinent for the change initiative future success. Cawsey et al. (2016) suggests change leaders need to make the implicit norms explicit and address dysfunctional norms while harness the currently useful ones. To make implicit norms explicit, the change leader needs to develop formal policies and procedure. To address employees bypassing College X’s approval, solutions to expedite decisions (e.g. more frequent steering committee meetings) can be explored and then captured in policies and procedures documents. Finally, to mitigate the previous issue of barriers to experimenting with technology in the former organizational readiness analysis, all barriers that impeded staff from accessing technology need to be removed and staff attempts to access and integrate technology in their classes should be rewarded by leadership.

*People.* The final component of the transformation process is the people. Cawsey et al. (2016) defines people as the individuals that perform the tasks within the organization. As previously discussed in the former chapter, Academy X is comprised of thirty-one staff members. According to Cawsey et al. (2016) it is invaluable for the change leader to understand not only the individuals in the organization but also how they will respond to the change initiative. First, to understand the stakeholders’ roles and responsibilities in the organization, roles and responsibility charting can be leveraged to provide clarity. Furthermore, stakeholders will have a spectrum of awareness of the change ranging from being unaware to buying-in to the change. The situational leadership approach likewise acknowledges the variety of readiness

levels amongst stakeholders (ability and willingness to accomplish a task) (Hersey and Blanchard, 1988). To increase the likelihood of LMS adoption, tailored responses to stakeholder reactions will be formed from the CBAM model. The CBAM model categorizes stakeholders into the following SoC in response to an innovation: awareness, informational, personal, management, consequence, collaboration, and refocusing (Hall, 1979). In the informational stage, the change leader could share bits of information about the LMSs effectiveness, showcase how the platform can be used to better Indigenize the curriculum, and host Q & A sessions for staff to pose their inquires. In the next SoC the personal stage, the change leader could send information about the change home in the school newsletter, post information on the school website, host presentations, and highlight other secondary schools that have had success with their LMS. Interventions in the management SoC are giving staff opportunities for feedback during staff meetings, partner stronger teachers with teachers who need support, and establish milestones in the calendar year. Collecting feedback from stakeholders will serve to address the former issued of not measuring stakeholder satisfaction in the previous organizational readiness assessment. The SoC consequence, can be addressed by showcasing online learning best practices, webinars, or potentially invite staff to a D2L conference. Some examples of collaboration at Academy X may include training sessions delivered by staff or establishing professional learning communities. Examples of the final SoC refocusing applied to Academy X are continuing to explore innovative use cases of tools and continue to experiment with new improvements/changes in the platform. Knowing staff members roles and responsibilities, their SoC and appropriate interventions to address each SoC is pertinent to advance LMS adoption.

*Outputs.* The final component of Academy X is to analyze its outputs. According to Cawsey et al. (2016) outputs are the services or products it produces. As expressed, in the

previous chapter, preliminary internal data indicated that Indigenous students in the school were earning more credits than the local school board. According to Cawsey et al. (2016) change leaders need to recognize “what gets measured is what gets done” (p. 72). Although Academy X has had initial success, to ensure these results continue as the school population increases, it needs to ensure that this change initiative is effectively measured. Likewise, for this change to be successful, LMS adoption must also be measured. Some measures may include tracking stakeholder usage, login history, Indigenous resources collected and utilized, and LMS satisfaction. The change initiative’s output effectiveness rests on the alignment of its organizational components (work, people, informal organization, and formal organization) and its congruences with the environment (Nadler & Tushman, 1999). As external components continue to change, internal components must adapt to continue to ensure alignment amongst its component parts to produce optimal outputs.

**Critical organizational analysis summary.** In the critical organizational analysis section Nadler and Tushman’s Congruence Model served as a framework to consolidate previous organizational change readiness findings, and further analyze Academy X. Throughout this analysis, previous and additional gaps were discussed, identified, and addressed. To ensure organizational fit in the future, being mindful of how Academy X’s strategy transforms its inputs into outputs and maintains congruence amongst its transformation process will continually be given consideration. After the critical organizational analysis has identified what needs to change, possible solutions to address the PoP can now be considered.

### **Possible Solutions to Address the PoP**

To arrive at the envisioned state, three possible solutions will be analyzed and evaluated. Each solution will be introduced and analyzed for its potential strengths and weaknesses. After

conducting a thorough analysis, all solutions will be evaluated, and one final optimal solution will be selected to address the PoP.

**Solution 1: maintain the status quo.** The first potential solution is maintaining the status quo. In the current state, staff are adopting the LMS solutions at different rates. Teachers currently approach the instructor tools in the LMS as a pedagogical buffet where they select tools based upon if they are perceived to be easy to use or beneficial in their class. This solution is supported by the TAM because individuals are more likely to use the technology if it is perceived as useful and more effective (Davis, 1989). DoI also supports this solution because adoptions that are optional and are on an individual-basis are adopted faster than an organization-wide mandated initiative (Rogers, 1995). Teachers are more likely to use tools if they are given the autonomy to choose them themselves.

***Implementing solution 1: Maintain the status quo.*** This solution might lengthen Academy X's journey to its envisioned state. Due to this flexible approach, students and parent/guardians need to be informed that they should expect inconsistencies in their LMS experience during the transition. This solution would require the Academy X's School Handbook to be revised to encourage teachers to experiment with the LMS tools. To support this policy a new practice that could be implemented is showcasing various LMS tools at monthly staff meeting to arouse interest amongst the staff. This solution would require very little resources. To overcome technical issues, leaders could direct staff to D2L's open source help resources.

***Strengths.*** A clear strength of this solution is it will not require the leader to undergo the difficult task of dramatically changing teachers' behaviour. It will also likely not overwhelm staff with additional levels of stress. Lastly, this solution does not require additional resources in the form of time, human, fiscal, information, and technology.

*Weaknesses.* Although Academy X may eventually reach its desired state, it will likely take a long time. The rate of adoption may never catch-up to the LMS's rate of innovation. Another weakness of this approach is since staff does not have any pressure from leadership to implement the tools many may simply opt-out of the change. Furthermore, according to Rogers (1995) innovators represent ~2.5% and early adopters are approximately only ~13.5% of consumers. The remaining ~84% of teachers may consider to not utilize the LMS at all. Overall, inconsistency will continue to breed inconsistency. Although this solution may slowly result in a gradual increase in LMS adoption, the initial knowledge gaps in LMS expertise amongst the staff will likely continue to widen over time. Additionally, staff members that are attempting to integrate Indigenous content into their courses for the first-time will need direction if they are going to effectively Indigenize the curriculum. Moreover, as these gaps widen the drawbacks associated with inconsistent LMS adoption previously discussed will be exacerbated.

**Solution 2: Mandate LMS adoption.** Another solution to consider is mandating teachers are required to teach with all the instructor tools of the LMS. Mandating LMS tools for teachers to adopt aligns with staying focused on purpose which is supported in adaptive leadership. In adaptive leadership, Heifetz et al., (2009) states "When you understand your orienting purpose, you can understand and make day-today decisions in that larger context (p. 221). Although mandating LMS tools could be argued to cause stress, providing no direction at all can also trigger stress and confusion because staff members are uncertain of what is expected of them.

***Implementing solution 2: Mandate LMS adoption.*** Mandating LMS adoption would prompt Academy X to set new benchmarks. The new goal set for staff would be all teachers are expected to use all the tools available to them in the platform. To arrive at this new goal, teachers would be expected to discard their former teaching preferences and instead follow this policy.

Like the previous solution, this policy can be recorded in Academy X's School Handbook and since the tools are being mandated it could also be reflected as a required responsibility within teacher's annual contracts. Additionally, Academy X might also consider including interview questions in their hiring practices related to applicants' level of LMS experience. Arriving at this intended organizational change would require an abundant amount of resources. Due to the robustness of the platform, a lot of time and a significant amount of human support, financial resources, and informational and technological resources would all be required. To illustrate how comprehensive the platform is, as a former LMS Training Specialist at D2L the first three-months of my new position were solely dedicated to learning the platform. To train staff members on instructor tools in the LMS, it will take a minimum of two full days of training before to school year at a cost of \$5,000 USD or ~\$6,000 CND (Learning Environment Instructor Tools Agenda, 2019). Additionally, teachers will need approximately a full week of time allocated for them to begin to create their online courses (e.g. setup content, grades, assignments, and learning activities). Additional human support to overcome ongoing technological issues and effectively deal with adaptive challenges would also be needed. Due to the comprehensiveness of the platform, weekly one-on-ones would likely be required for teachers to provide staff with the adequate amount of support that they need. Additionally, to meet the needs of even a small staff like Academy X, a full-time LMS support position would likely be needed to satisfy the ongoing support needs of staff.

*Strengths.* A benefit of this approach is instead of teachers being confused with what tools they are responsible to adopt; they will have more direction of what is expected of them. Additionally, even if teachers do not end up fully adopting all the instructor tools in the platform, what tools they do end of adopting may still be more than if no tools were otherwise mandated.

*Weaknesses.* An undeniable weakness of this solution is it is very resource intensive. As discussed, mandating LMS adoption of all the instructor tools would require an abundant amount of resources to be successful (e.g. time, human, financial, technological etc.). As time is directed toward the LMS, it is important to consider what other ways time is being syphoned away from other components of teaching and learning within the school. This solution may also be an unrealistic expectation for staff and may result in an unhealthy level of stress amongst staff. Some stress can motivate teachers, but too much can paralyze them. Furthermore, staff may also hold resentment against administrators for mandating an unrealistic solution and for not giving them an opportunity to provide their own input. If teachers end up feeling overwhelmed from this solution it could potentially have lasting effects that cause them to form change cynicism of LMSs which could hinder future adoption efforts if this solution proves to be unsuccessful. Also, since staff will be able to unlikely adopt all the instructor tools immediately, the existing issue of the LMS instructor tools being inconsistently used by staff remains unresolved.

**Solution 3: Incremental LMS adoption.** An alternative to both maintaining the status quo and mandating LMS adoption, is to compromise between these two solutions and incrementally adopt the LMS. In consultation with staff, this solution proposes to initially introduce a few strategic LMS instructor tools based upon tools that are visible to parents/guardians and tools that satisfy Academy X's requirements as a MIS. According to Brightspace for Parents (2018) the following tools/features are visible to parents/guardians in D2L: due dates, grades, portfolio items, and activity feed. According to the MoE's Private Schools Policy and Procedures Manual (2013) a MIS is responsible for showing the following in an inspection: lesson plans, multiple samples of student work, a variety of assessment types assignments, quizzes, and rubrics. To ensure parents/guardians can view materials in Brightspace



for Parents and the requirements as a MIS are satisfied, the following tools that will be strategically set initially as expectations for staff are due dates, grades, portfolio items, and activity feed. Once staff members have had time to learn these tools, each year they will be asked to incrementally add more instructor tools to their teaching repertoire. Additionally, for those teachers that still require extension, they are still encouraged to do their own self-guided learning using the previously mentioned D2L support resources.

This solution is consistent with the type of organizational change, all adoption theories, the adaptive and situational leadership approaches, and the Indigenous worldview. As discussed earlier in the Chapter, this change was classified as incremental and anticipatory and the tuning approach centered on small incremental changes as the suggested method of how to change. This incremental approach is consistent with DoI because Roger's (1995) maintains to ensure each category of adopters is challenged and kept motivated it is important to scaffold the training and support provided to staff members. The CBAM also acknowledges that "change is viewed as a process rather than an event. Change is not automatically accomplished for the individual teacher by a memo decreeing that change will occur...Rather change entails an unfolding of experience and gradual development...it is a developmental process that takes time" (Hall, 1979, p. 204). Finally, this solution is supported by the TAM because this approach will present the instructor tools to staff in a manner that they are perceived to be easy to use and effective. As a former Training Specialist, I would often begin my engagements with managing the group's expectations by informing them that they will not be experts at the end of this session but instead they can expect to know how to get started and where they can go to get support and they continue their learning journey. This solution is also supported by adaptive and situational leadership. According Heifetz et al., (2009) change leaders must keep the organization in a state

of productive zone of disequilibrium where there is “enough heat generated by your intervention to gain attention, engagement, and forward motion, but not so much that the organization (or your part of it) explodes” (p. 29). And situational leadership argues “the emphasis in Situational Leadership will be on the behaviour of the leader in relation to the followers” (Hersey and Blanchard, 1988, p. 170). Finding a balance between mandating nothing and mandating everything through incremental adoption will ensure teachers receive tailored healthy levels of stress conducive to motive them to adopt the LMS. Finally, this solution aligns with the Indigenous worldview because as discussed in Chapter 1 a central component of the Two-Eyed Seeing approach is a co-learning philosophy (Hatcher et al., 2009). As all school members work together collaboratively to adopt the LMS they will be likewise embracing the Indigenous lens.

***Implementing solution 3: Incremental LMS adoption.*** The first step in implementing incremental LMS adoption is to discuss with staff the essential instructor tools required in the LMS and then set the essential tool expectations previously mentioned. Each year afterwards, the goal would be to further adopt more and more instructor tools within the platform eventually until staff take on a mentorship role themselves to help new staff members. To help facilitate this solution, like the previous solutions, this expectation will be captured in Academy X’s School Handbook. Additionally, the change leader will provide a checklist to staff that displays what instructor tools are expected of them incrementally each year. This way teachers can gradually develop over time comfort with the platform being challenged but not overwhelmed. Although this solution would require more resources than maintaining the status quo, it would not need as much resources as mandating all the instructor tool in the LMS. This solution would still require training; however, because this solution is not centered on doing everything at once it could scale back its training from two days to one. This would reduce the financial expense from \$5,000

USD to approximately \$2,500 USD or ~\$3,000 CND (Learning Environment Instructor Tools Agenda, 2019) and be a more realistic learning curve for teachers. Although this solution would result in more effort to support staff than not mandating any tools, it would still be a lot less than all the support needed if all the tools were mandated. Finally, to ensure there is consistency, bi-weekly one-on-ones with teachers will be scheduled to provide support and fill in gaps in online courses that are uncovered through performing course audits.

*Strengths.* A strength of this solution is teachers will not be overwhelmed with unrealistic expectations if all tools were mandated or confused if they received no direction. Although this solution will require more resources than the first solution, it is still less than the proposed second solution and has the potential to have a higher ROI. The one inherent strength that this solution also has which has not been effectively addressed by the other solutions is this solution solves the LMS inconsistency issue previously raised in the PoP. As initial strategic tools are mandated across the school, all stakeholders will receive a consistent LMS experience.

*Weaknesses.* One weakness that this solution shares with the second solution is it will inevitably have to confront and address adaptive challenges. According to Heifetz et al., (2009) “Adaptive challenges can only be addressed through changes in people’s priorities, beliefs, habits, and loyalties” (p. 19). It is transparent that these adaptive challenges are eminent and although they will not be easy to tackle they must be addressed for this change to be successful.

**Recommended solution.** Although there are strengths and benefits of each approach, the third approach emerges as the most viable solution to address this PoP. The final solution incremental LMS adoption is the recommended solution because it incorporates the strengths of the first two solutions while also minimizes their inherent weaknesses. Incremental LMS adoption provides direction to staff unlike maintaining the status quo ignores but also does not

overwhelm staff unlike mandating all the tools. Additionally, although this solution will require more resources than the first solution, it still requires less resources than the proposed second solution. Moreover, the one inherent strength that this solution also has which is absent in the other two alternatives is this solution effectively addresses the inconsistency issue raised in the PoP. Lastly, although having to overcome adaptive challenges is a weakness of this solution it is what is expected if real meaningful change is to occur.

**Model for change.** Now that the best solution has been selected, the Plan, Do, Study, Act (PDSA) model for change will be utilized to guide the implementation and ongoing monitoring of this change initiative. Deming developed the PDSA cycle to continuously improve an organization in his book entitled “Out of the Crisis” (Deming, 1983). Benefits of the PDSA cycle include: it is applicable to a variety of organizations, offers a framework for improvement methods rooted from theory, provides the ability to adapt as learning happens, empowers others to take action, and utilizes teamwork to result in improvements (Moen & Norman, 2006). Although the PDSA have been used in a variety of fields, it has been increasingly used in education and has been proven to be an effective tool in public-school contexts (Tichnor-wagner et al., 2017). To serve as a model for change, each stage in the PDSA model will be summarized and incorporated in the implementation, communication, and evaluation sections in Chapter 3.

**Plan.** In this stage, the objective, questions and predictions, and plan to carry out the cycle are discussed (Moen & Norman, 2006). Academy X has discussed its envisioned state, anticipated obstacles, and leadership approach to drive this change initiative forward.

**Do.** This next step involves carrying-out the plan, capturing the anticipated and unanticipated issues that arise, and analyzing the information collected (Moen & Norman, 2006). Academy X in this stage will document predicted and unpredicted factors that impeded adoption

and will carefully study this information to further understand the complexities of the issues identified.

*Study.* This stage analyzes the data previously collected, compares this information to previous forecasting, and finally summarizes lessons learned (Moen & Norman, 2006). Academy X will analyze data collected, compare the results, and then conclude with the lessons learned.

*Act.* This final stage is when changes are made and if appropriate the next cycle will occur (Moen & Norman, 2006). Based upon the analysis, Academy X will make appropriate changes and will begin the PDSA cycle again until the organization has reached its desired state. With the optimal solution in mind and the model of change selected, the change leader is primed to confront important ethical considerations related to this change.

### **Leadership Ethics and Organizational Change**

Leaders are responsible for carefully considering the ethical considerations of their organization. Leaders are expected to be ethical, especially leaders in education, and each decision must carefully take into consideration ethics (Northouse, 2016; Bowen, Bessette, & Chan, 2006; Vogel, 2012). A central component of decolonizing education and adopting the Indigenous worldview is teaching students to be ethical (Munroe, et al., 2013). Therefore, it is of utmost importance for leaders to carefully consider ethical issues and then determine how to best address these ethical issues for themselves and students. In this section, ethical issues that pertain to Academy X and the process of increasing LMS adoption will be identified and addressed.

**Ethical question 1: How to meet the ethical standards of the Ontario College of Teachers?** Professional careers acknowledge the value of ethics; however, “The field of education is lagging behind the medical and human services professions which demand that candidates take courses in professional ethics” (Bowen et al., 2006, p. 1). To ensure ethics in the profession of teaching are not overlooked, the Ontario College of Teachers (OCT) has outlined

ethical standards that need to be met by all Ontario certified teachers. According to the OCT the Ethical Standards Ontario certified teachers must abide by are: Care, Respect, Trust, and Integrity (The Ethical Standards for the Teaching Profession, 2018). Being a member of the OCT myself and considering that most staff members at Academy are also OCT certified raises the importance of ensuring these ethical standards are met. As Academy X moves forward with increasing LMS adoption, the first ethical question is, how to ensure OCT's ethical standards of care, trust, respect, and integrity are met?

**Care.** The ethical standard of Care is defined as “compassion, acceptance, interest and insight for developing students' potential. Members express their commitment to students' well-being and learning through positive influence, professional judgment and empathy in practice” (The Ethical Standards for the Teaching Profession, 2018). Academy X as an organization and myself as a leader can work towards fulfilling the expectations of this standard by modelling to staff members a keen interest in valuing students work in the LMS. To celebrate students' efforts, the Portfolio tool in D2L can be leveraged as a way for students to showcase and celebrate their digital work (Brightspace Portfolio, 2019). When staff members leverage the LMS to celebrate student work, teachers will work toward satisfying the ethical standard of care.

**Trust.** The ethical standard of Trust is described as “embodies fairness, openness, and honesty. Members' professional relationship with students, colleagues, parents, guardians and the public are based on trust” (The Ethical Standards for the Teaching Profession, 2018). Academy X can meet this standard by evaluating fairly and communicating professionally in the platform. To ensure fairness when evaluating, D2L's platform allows educators to complete blind marking so that the students names are not visible when evaluating written responses in quiz questions (How Can You Use A Blind Marking Method in Quizzes, 2019). As a leader I can

help teachers foster professional relationships with students by showcasing to them netiquette rules. According to Mintu-Wilmsatt et al., (2010) “Developing netiquette rules at the onset of the course and including these guidelines in the students' course syllabus can help avoid future conflicts” (p. 264). As teachers evaluate with fairness in mind and follow netiquette rules, they will work toward ensuring the ethical standard of trust is upheld.

**Respect.** The ethical standard of Respect is described in the OCT as “Members honour human dignity, emotional wellness and cognitive development...they model respect for spiritual and cultural values” (The Ethical Standards for the Teaching Profession, 2018). Academy X as an organization and myself as a leader can fulfill the standard of trust by incorporating students’ Indigenous culture and spirituality in the platform through creating and issuing certificates aligned with the Indigenous group’s values and through providing Indigenous resources to teachers. Each month Academy X recognizes students who display characteristics of the local Indigenous group’s traditional values. In the LMS, digital certificates based upon these values can be created and then issued to students who are recognized each month for best displaying these values (Creating a Custom Certificate, 2018). To Indigenize the curriculum, the Community Coordinator can also collect Indigenous content from the community, College X’s Indigenous Knowledge Center, and staff members and store them in a local repository that is directly searchable and retrievable within all teacher’s online courses (Brightspace Learning Repository Collections, 2018). Through providing Indigenous resources and issuing digital awards certificates based upon the traditional Indigenous values, Academy X will work toward incorporating the spiritual and cultural values to meet the ethical standard of respect.

**Integrity.** Lastly, the final ethical standard of integrity is described as “Continual reflection assists members in exercising integrity in their professional commitments and

responsibilities” (The Ethical Standards for the Teaching Profession, 2018). As this change initiative goes throughout its implementation process, Academy X can fulfill the standard of trust by providing opportunities for reflection. Teachers will be given opportunities to reflect on what is going well and what could still be improved in the platform individually and as a staff. Through this reflection, staff can step-back and take an honest look at what have been successes with the platform and areas of improvement. Through this reflection, the ethical standard of integrity will be satisfied.

**Ethical question 2: How to manage financial resources?** As discussed, as a MIS—unlike public schools—Academy X receives a variety of types of funding from various levels of government and private organizations. As much as this is an immense advantage for our school over public schools, it creates its own ethical dilemmas. According to Arnson (2001) “CEOs are obliged to set a moral example for organizational members and to demarcate the constant striving for increased profits” (p. 245). Although Academy X is a not-for-profit organization, it still needs to carefully consider who it takes finances from, how resources are allocated, and finally how to manage competing resources.

***Who should Academy X accept financial resources from?*** One ethical dilemma that Academy X has already been confronted with is Imperial Oil provides funding to Actua another not-for-profit organization that Academy X is partnered with which provides funding for our Land Camp program. Knowing that Imperial Oil received their resources from likely doing irreversible harm to the environment or potentially has displaced Indigenous communities where the resource was extracted, should Academy X accept this funding? Similarly, a foundation from the local reserve has been established to provide funding for Indigenous students who need assistance with financing athletic opportunities. The funding from this foundation is solely



financed from sales of tobacco products on the reserve. Knowing how these companies are responsible for a lot of the current health issues with the community, should Academy X accept funding from this foundation? When Academy X willingly accepts contributions it implicitly is condoning the actions that have made these contributions possible. Conversely, would it be better for the students if the money is not accepted and they were unable to participate in the land camp program or athletics? Are there other funding opportunities that Academy X can explore? To best address this ethical issue, organizations that are interested in providing finances and services to Academy X need to be carefully vetted to ensure the values of outside organization are in alignment with Academy X's vision and mission.

*How to allocate financial resources?* To complicate this ethical dilemma further, some of our financial contributions that we accept are meant to be only directly invested in Indigenous students. As mentioned, Academy X accepts both Indigenous and non-Indigenous students. An example of this ethical issue is best showcased in Academy X received funding for EAs intended to support only Indigenous students. It seems unfathomable to instruct an EA to aid students in a classroom who are Indigenous but not the students who are not. To resolve this ethical issue, funding should not be viewed as financing one group or the other but instead focused on investing in reconciliation. The Truth and Reconciliation (2015) has identified education needs to play an important role in truth and reconciliation. To achieve reconciliation, both groups need to be valued, supported, and overall need to work together.

*How to manage competing resources?* Although Academy X has been very fortunate to receive a variety of funding sources in its early years, departments within Academy X continue to fight over available resources. "In a world of finite resources, including time and people, at some point the selfish interests of one party will conflict with another" (Avolio & Locke, 2002,

p. 175). For example, should funding be given to finance the LMS licensing fee or instead be used to further develop other programs in the school (e.g. athletics, robotics, engineering etc.)? To effectively address this ethical question, Academy X defers school-wide decisions to a steering committee. This way instead of the change leader simply making an executive decision that potentially favors their own biases, a collective group of leaders within the organization can make impartial decisions for what is most valuable for the school.

**Ethical question 3: How to manage Indigenous content?** Academy X is affiliated with College X and has access to a wealth of Indigenous Knowledge (IK). According to Battiste and Henderson (2009) “IK is a growing field of inquiry...It includes Indigenous science, arts, humanities, and legal traditions” (p. 5). Moreover, there is also a growing need to indigenize the curriculum; however, educators must do so carefully and respectfully. A call to action from the Truth and Reconciliation Commission (2015) is “We call upon the federal, provincial, and territorial governments, in consultation and collaboration with Survivors, Aboriginal peoples, and educators, to: i. Make age-appropriate curriculum on residential schools, Treaties, and Aboriginal peoples’ historical and contemporary contributions to Canada a mandatory education requirement for Kindergarten to Grade Twelve students” (p. 7). A main concern elders from the local community have is they are uncomfortable with sacred resources losing their sacredness. As mentioned, the LMS has the capability to publish digital resources to locally repositories that are searchable and retrievable directly into their online courses (Brightspace Learning Repository Collections, 2018). The ethical dilemma is how content can be made available to staff to indigenize the curriculum, but also be respectful of sacred resources? After careful consideration, a solution that would put Indigenous resources in the hands of staff members but also will ensure sacred resources remain sacred, is having the community coordinator serve as a learning object

curator to the local repository. Additionally, allowing students to be curriculum creators through inquiry-based learning, and inviting elders to participate in lessons through conversations or demonstrations directly in the classroom or within the local community are additional strategies to safeguard sacred knowledges (Munroe et al., 2013). Moreover, a local repository can be created in the platform so that any learning object that is published to the repository is tagged with a “In review” status and is by default not visible for other staff members when searching. It is only when the content curator carefully reviews the learning object to determine if it is appropriate and valuable will the resource’s status be changed to “Approved” which will make the resource then searchable and retrievable for staff members. This measure will ensure sacred resources are kept sacred while also equip teachers with the invaluable resources they need to begin to Indigenize their courses.

**Conclusion.** This section began with exploring possible solutions to address the PoP. The three solutions were proposed, and each solution’s strengths and weakness were analyzed. After each solution was assessed, incremental LMS adoption was determined to be the best solution because it aligned with the type of organization change, all adoption theories, and the adaptive and situational leadership approaches. The PDSA cycle was then selected as the model for change. This chapter concluded with leadership ethics and organizational change. In this segment three ethical questions related to this OIP were raised, carefully contemplated, and addressed. Now that the planning and development of this OIP have concluded, this endeavour will transition to how this change will be implemented, evaluated, and communicated.

**Chapter 3: Implementation, Evaluations, and Communication**

Chapter 1 introduced the problem and the context and Chapter 2 provided the planning and development components of this OIP. To continue to transition Academy X from its current state to its envisioned state, Chapter 3 will offer a detailed change implementation plan, a change process monitoring and evaluation section, and a plan to communicate change. Finally, this chapter will conclude with a discussion of next steps and future considerations.

**Change Implementation Plan**

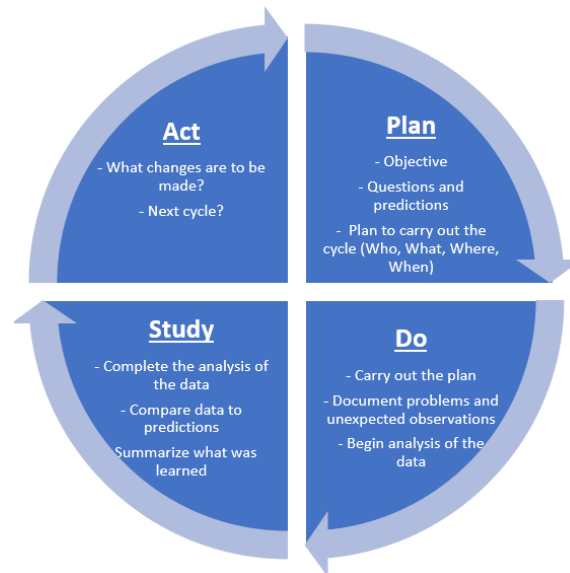
Studies suggest that approximately 70% of change efforts result in failure and are attributed to lack of guidance and poor implementation (Kang, 2015). Although these failure rates have been criticized for not being as high as previously suggested (Hughes, 2011), what remains clear is those who fail to plan, plan to fail. “Great ideas don’t generate value until they are effectively executed” (Cawsey et al., 2016. p. 298). To reap the benefits of increased LMS adoption, a change implementation plan will be offered to deploy this change initiative. As discussed in Chapter 2, the change implementation plan will leverage components of the PDSA cycle, the change path model, and elements of both adaptive and situational leadership. The change implementation plan will incorporate the plan stage from the PDSA cycle, the awakening and mobilization stages from the change path model and aspects of both adaptive and situational leadership. The change implementation plan overview is displayed in Table 1.

Table 1

*Change Implementation Plan Overview*

Model for Change	PDSA	Change Path Model	Leadership Approach
Change Implementation Plan	Plan	Awakening	Adaptive Leadership
		Mobilization	Situational Leadership

**PDSA cycle: Plan.** The roots of the PDSA can be traced back to the scientific method (Moen & Norman, 2009). Deming developed the PDSA cycle to continuously improve an organization (Deming, 1983). Over time it has been refined to ultimately grow into a framework that today serves as a model for informal improvement to the most complex improvement efforts (Moen & Norman, 2009). Figure 4 summarizes the four stages of the PDSA cycle.



*Figure 4. PDSA Cycle. Adapted from “The Improvement Guide: A practical Approach to Enhancing Organizational Performance” by G. Langley et al., 2009, p. 24. Copyright 2009 by A Wiley Imprint.*

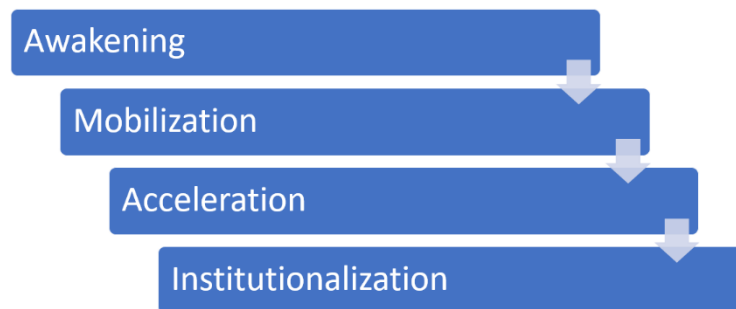
The first stage of the PDSA cycle is plan. The plan stage is comprised of the objective, questions and predictions, and plan to carry out the cycle (Moen & Norman, 2009). Academy X’s central objective remains focused on increasing LMS adoption. The goals of the plan change will pave the pathway toward Academy X reaching its overarching goal.

**Goals of the planned change.** Effective goals are specific, measurable, attainable, relevant, and time-bound (SMART) (O’Neil, 2000). To increase LMS adoption, SMART goals related to login history, tools engagement, LMS satisfaction, credit accumulation, and Indigenous resources will be set. Academy X cannot effectively adopt a LMS if none of its stakeholders are accessing the platform. Login history goals will be established based upon the

school's annual calendar and instructor tool expectations. Since Academy X has approximately 200 instructional days in a year, teachers and students are expected to login to their courses each day resulting in a goal of 200 logins annually. Additionally, because teachers have been asked to update their instructional tools every two weeks and there are approximately 40 weeks in the school year, the goal of 20 logins a year for parents will be set. In addition to login history, SMART goals related to tool engagement will be set. Following the optimal solution (incremental LMS adoption) in Chapter 2, staff will be expected to first utilize the instructor tools determined to be most essential based upon the MoE's *Private Schools Policy and Procedure Manual* (2013) and will be expected to incrementally add annually additional tools to their teaching repertoire. Aside from tool engagement, training and ongoing support are inextricably linked with LMS adoption (Al-busaidi, Kamla, and Hafedh Al-shihi, 2012). SMART goals related to LMS training and support satisfaction levels will be set based upon benchmarks formed from initial feedback collected from stakeholders. The last two goals of the planned change are directly aligned with the organizational aims of Academy X (support student success and mobilize indigenous knowledge). Based upon the students' credit accumulation from the former year, a total annual school average goal of 7.0 / 8 credits has been set. To effectively decolonize education, Munroe et al. (2013) encourages teachers and students to create and develop resources aligned with Indigenous languages, knowledges, and values. To contribute toward Indigenizing the curriculum, the cultural coordinator's goal is to publish three Indigenous resources a week and each teacher is expected to retrieve at least one Indigenous resource in each unit in their courses. As these goals work toward increasing credit accumulation and making Indigenous resources more readily available for staff, they will not only work towards LMS

adoption but will simultaneously contribute to achieving the organizational goals of Academy X. A summary of these goals of the planned change is provided in Table A2 in the Appendix.

**Change Path Model.** As discussed earlier in the Chapter, in addition to the plan stage in the PDSA cycle, the change path model will aid to form the change implementation plan to bring Academy X to its envisioned state. The change path model is made up of four stages: awakening, mobilization, acceleration, and institutionalization (Cawsey et al, 2016). Both the awakening and mobilization stages will be incorporated as part of the change implementation plan.



*Figure 5. Change Path Model. Adapted from “Organizational Change: An Action-Oriented Toolkit” by T. Cawsey et al., 2016, p.55. Copyright 2016 by Sage.*

**Awakening.** The awakening stage identifies the need for change and then seeks to validate the opportunities or problems that sparked the desire for change with data (Cawsey et al., 2016). This stage is akin to the leader behaviours get on the balcony and identify adaptive challenges in adaptive leadership (Heifetz et al., 2009) previously introduced in Chapter 1 and discussed in detail in Chapter 2. This stage also aligns with the Indigenous worldview as a central need of this change is to ensure the Indigenous students’ perspective are reflected and valued throughout the school (Munroe et al., 2013). As mentioned, this PoP is both an opportunity and a problem. To showcase this change as an opportunity, external client success stories and internal support for the change captured from surveys will be leveraged. To illuminate the problems of the PoP external research from studies and internal feedback collected in surveys will be utilized. Providing opportunities for organizational members to express the

gaps through an organizational survey will increase the likelihood of the appropriate changes being made (Armenakis & Harris, 2009). Once the need for change is validated, to build a case for the need for change, the results will be showcased to leadership and the whole organization.

***Mobilization.*** Once Academy X has been awakened, the organization can begin to mobilize. The first process of mobilization is to interpret the change through formal structures and systems and then utilize them (Cawsey et al., 2016). As discussed in Chapter 1 and Chapter 2, Academy X is an organization that relies heavily on its organizational structure. It will inevitably be easier to try to operate within Academy X's formal system than it would be to otherwise operate outside of it. As expressed in Chapter 1, as a LMS Consultant many decisions related to this change are in the scope of my purview (LMS selection, implementation, and adoption methods) but the financial approval and annual renewal of the LMS are not within my control. As outlined in Chapter 1, Academy X's policy stipulates that the steering committee will guide the direction of Academy X and College X has resource and process power over Academy X. In this situation, College X's policy stipulates the Manager of IT is the decision maker who has the power to approve all forms of software and its financial expenses within the organization—including Academy X's LMS of choice. To increase the likelihood of this decision being aligned with the change leader's preferences, the request for approval needs to be carefully communicated using good processes (introduce the notion of the LMS early) and by showcasing how the project aligns to the mission of Academy X (supporting student success and mobilizing Indigenous languages) (Cawsey et al., 2016). In addition to these techniques, both the rational approach (having a sponsor) and coalition building (support from staff) can further aid to achieving the desired outcomes in this formal approval process (Howell & Higgins, 1990).



In addition to working within formal structures and systems within Academy X, to effectively mobilize the change initiative the change leader must also assess and leverage power and cultural dynamics to build support for the change (Cawsey et al., 2016). In my current role, my power can be used to advance this change by leveraging both my knowledge power (expert knowledge of LMSs) and personality power (strong rapport with staff) (Cawsey et al., 2016). In addition to my personal power, the cultural dynamics of the organization must also be assessed. According to Dickson, Castano, Magomaeva & Den Hartog (2012) culture is “values adapted by the group of people that define the way of life for that particular group” (p. 484). To assess the cultural dynamics of the organization, the change agent can solicit beliefs and values from staff (Cawsey et al., 2016). Interacting with staff members would likely reveal the organization is centered on valuing both traditional and mainstream ways of knowing. Showcasing the LMS as using modern technology to pay tribute to the past will aid to mobilize this initiative.

The final processes of mobilization are to manage various stakeholders’ reactions, taking into consideration various stakeholder’s knowledge, reputation, abilities, and relationships (Cawsey et al., 2016). Employees should be the cornerstone of any change initiative because employee resistance is one of the biggest obstacles to overcome (Palmer, 2004). To effectively assess and leverage stakeholders’ competencies, Hersey and Blanchard (1988) maintain a central component of situational leadership is to assess followers’ readiness levels (ability and willingness to accomplish a task) and then assign them the most appropriate leadership behaviour (delegating, participating, selling, or telling). As discussed, CBAM also classifies levels of concern and provides interventions to effectively respond to a variety of stakeholder reactions. Dudar, L., Scott, S. and Scott, D. (2017), state “it is important to have not only the leader, educator, and student perspectives represented but also researchers who can provide

recommendations and potential models of best practice from field-based research...respectful of all stakeholders” (p. 47). Overall, stakeholders’ reactions to LMS adoption can be categorized into being positive, ambivalent, or negative.

According to Roger’s DoI (2003) innovators represent approximately 2.5% and early adopters are an estimated 13.5% who would both have positive reactions to adopting an innovation. According to Cawsey et al., (2016) change leaders need to channel the energy of these stakeholders, select individuals from this group to serve as exemplars, and tap into their comfort levels to manage the pace of the change for others. For example, teachers at Academy X who are excelling at adopting D2L can be utilized as an exemplar for other staff members.

Addressing indifferent stakeholder reactions is equally important. According to Cawsey et al., (2016) to effectively respond to ambivalent stakeholders, leaders need to foster an environment for people to get involved and voice their concerns. Protecting voices from below is a leader behaviour of adaptive leadership that is suited to respond to this form of reaction. For instance, EAs or support workers may feel ambivalent about the LMS because they do not have as many responsibilities within the LMS as teachers are tasked with (e.g. collecting student evidence compared to utilizing instructor tools in courses). To combat ambivalence amongst stakeholders, they will be given several opportunities to provide input and participate in the change. Opportunities to provide input include completing feedback surveys at the end of each semester, allocating time to raise inquires in staff meetings, and informally sharing ideas related to the change throughout the year. Albeit these roles have less responsibilities compared to a teacher; they still serve a vital role in students’ academic success. Explicitly making the connection to ambivalent stakeholders how their involvement contributes to student success will further motivate ambivalent stakeholders to become engaged in the change.

As this change initiative continues to unfold, some stakeholders may react to change negatively. According to Roger's DoI (2003) approximately 16% of individuals adopting a change initiative are classified as laggards. Several additional reasons why a change may be met with negative reactions are: communication processes are flawed, doubts of the merit of the change, limited change experience, negative former experiences with change, negative former experiences with the change leader, negative peer reactions, or an ethics concern (Cawsey et al., 2016). Additionally, according to Thundiyil et al. (2015) change cynicism can have a large impact on the change initiatives success. Although the previous organizational analysis in Chapter 1 determined Academy X's previous change experiences were not cynical toward change, since it has undergone many large-scale change initiatives and it is only in its third year of operation, it is at-risk of developing change cynicism. To proactively address change cynicism, Thundiyil et al., (2015) suggests showing that change is possible, utilizing dialogic interventions, and align employee interests with the success of the change initiative. A strategy that aligns with the Indigenous worldview is showcasing to language teachers how they can utilize the variety of multimedia features in the platform to continue to contribute toward language and cultural revitalization (Munroe et al., 2013). To effectively respond to a spectrum of negative reactions amongst a variety of stakeholders, tailored strategies inspired by the situational leadership approach have summarized in Table A3 in the Appendix.

**Priorities: short, medium, and long-term goals.** The priorities of this change can be summarized into short, medium, and long-term goals. Initially, the LMS will need to be setup and then tailored to Academy X's organizational context. In this stage, the LMS Consultant will utilize all the administrator tools to setup the platform (e.g. create course shells, user accounts, enrollments etc.). To reflect the Two-Eyed Seeing approach several tools in the platform can be

leveraged to Indigenize the online learning experiences for users. Examples may include incorporating the Indigenous values as certificates in the Awards tool and creating a variety of custom widgets that incorporate Indigenous content (e.g. CBC Aboriginal News). Once the instance has been setup and configured, initial training needs to be provided to staff, students, and introduced to parents/guardians. As discussed in Chapter 2, the optimal solution requires staff to utilize a few strategic essential instructor tools and then incrementally add more tools to their teaching repertoire annually. The short, medium and long-term priorities of change previously discussed are summarized and elaborated upon in Table 4 below.

Table 4

*Short, Medium, and Long-Term Priorities for Change*

Priority		Resources
Short-Term Goals (July-August)	Setup the LMS <ul style="list-style-type: none"> <li>- Create courses</li> <li>- Create users</li> <li>- Perform enrollments</li> <li>- Customize roles and branding</li> </ul>	<ul style="list-style-type: none"> <li>- Administrator help resources</li> </ul>
Medium-Term Goals (September-June)	Provide training and ongoing support for staff, students, and parents. <ul style="list-style-type: none"> <li>- Deliver training at the beginning of the year for staff, students and deliver presentation for parents</li> <li>- Meet bi-weekly with staff members</li> <li>- Provide weekly office hours</li> <li>- Ensure consistent usage of essential instructor tools</li> </ul>	<ul style="list-style-type: none"> <li>- Instructor help resources</li> <li>- Two days of training.</li> <li>- Roles Responsibility Chart</li> <li>- Time allocated for ongoing support</li> <li>- Instructor Semester Start Checklist</li> <li>- Instructor Ongoing Checklist (Year 1)</li> </ul>
Long-Term Goals (3 years)	LMS adoption <ul style="list-style-type: none"> <li>- Add more usage of instructor tools incrementally</li> <li>- Set and refine benchmark targets as needed</li> </ul>	<ul style="list-style-type: none"> <li>- Instructor Ongoing Checklist (Year 2 and 3)</li> </ul>

**Implementation limitations.** As much as there is a lot of promised potential within LMSs, as mentioned in the PoP, if implemented poorly instead of enhancing teaching and learning, this change initiative could potentially hinder it. Consistent adoption of the instructor tools across courses will be a prevalent challenge. If teachers do not consistently utilize the instructor tools in their course this will result in inconsistent experiences for students and parents/guardians. Teachers already have limited time available. Allocating a day at the beginning of the year for training and one-on-ones throughout the year to provide ongoing support is important to setup teachers for success; however, the change leader must be cognizant of how time is being subtracted from teachers' many other responsibilities. Another challenge with this change initiative is stakeholders may have unequal access to the internet. Although Academy X provides devices and WIFI throughout the school to staff and students, stakeholders may have limited access to the internet at home.

**Change implementation plan summary.** An effective implementation plan is directly correlated with a change initiatives' success. The plan stage from the PDSA cycle, and the awakening and mobilization stages from the change path model were utilized as a framework to form the change implementation plan. In the plan stage the goals to carry out the planned change were outlined. In the awakening stage the plans to validate the PoP with external and internal data were discussed. The mobilization stage made sense of the change through formal structures, assessed power dynamics, and discussed how to manage positive, ambivalent, and negative stakeholders' reactions. Finally, this section concluded with outlining short, medium, and long-term priorities and important implementation limitations to consider. Equally important to effectively implementing the change, is measuring the progress of the change.

### **Change Process Monitoring and Evaluation**

Measurements matter. “Evaluation is a form of knowing about a program's impact on an organization” (Butler, Scott, Edwards, 2003, p. 65). It is difficult to determine if a change initiative is progressing, remaining stagnant, or failing if progress is not being assessed and evaluated over time. Change initiatives that have measurement tools embedded in them will increase the likelihood of a change being successful (Cawsey et al., 2016). The merits of measuring change are abundant. Assessing change can help to clarify expectations, adjust, assess buy-in, guide future initiatives, increase student achievement, and ensure over time sustainable educational change (Cawsey et al., 2016; Fullan, 2006). This OIP will measure change through a mixed studies approach. According to Creswell (2012) the mixed method approach is beneficial because “the problems addressed by both social and health service researchers are complex and the use of either quantitative or qualitative approaches by themselves is inadequate to address this complexity” (p. 203). Quantitative data will be captured from Data Hub reports and qualitative data will be collected through surveys. To monitor and evaluate the change process, the PDSA, change path model and the adaptive and situational leadership approach will be utilized. The change process monitoring and evaluation section is composed of the do, study, and act stages from the PDSA cycle, the acceleration and institutionalization stages from the change path model and components of adaptive and situational leadership. Please see Table 5 below:

Table 5

*Change Process Monitoring and Evaluation Overview*

Model for Change	PDSA	Change Path Model	Leadership Approach
Change Process Monitoring and Evaluation	Do	Acceleration	Adaptive Leadership
	Study		Situational Leadership
	Act	Institutionalization	Adaptive Leadership Situational Leadership

**PDSA cycle: Do & Study.** The next stage in the PDSA cycle is do. This stage involves carrying-out the plan, capturing the anticipated and unanticipated issues that arise, and analyzing the information collected (Moen & Norman, 2009). When carrying-out the plan, as previously introduced in Chapter 1 and expanded upon in Chapter 2, the three main types of situational challenges identified by the adaptive leadership approach that need to be addressed are technical, technical and adaptive, and adaptive. In this phase, Academy X will also document predicted and unanticipated factors that impede adoption. Before the change is implemented, the change leader will leverage research and their professional experience to record anticipated issues (e.g. technical support, technical issues, inconsistent instructor tool adoption). To capture unanticipated issues, feedback collected from staff through the change in meetings, one-on-ones, and surveys will be carefully documented. As the predicted and unpredicted barriers become transparent, this information will then be carefully studied to effectively resolve the issues identified. Addressing situational challenges when carrying-out the plan, capturing the anticipated and unanticipated issues that arise, and consequentially analyzing these issues to develop solutions will satisfy the components of the do stage of the PDSA cycle.

Once the do stage has been completed, the next stage in the PDSA cycle is study. This phase will further analyse the data previously collected, compare this information to previous forecasting, and finally summarize lessons learned (Moen & Norman, 2009). This stage will prompt Academy X to compare the data it has collected to the previously set goals of the planned change in the plan stage of the PDSA cycle. Login history can be measured by generating a monthly Data Hub report based upon the User Enrollments and User Logins data sets. Tool engagement will be measured monthly by the change leader digitally auditing the instructors' courses and completing and then summarizing the results in a Google Sheet. LMS satisfaction

will be measured by providing surveys after training and at the end of each semester. To measure credit accumulation, a Data Hub report utilizing the Final Grades data set will be performed bi-weekly. Lastly, Indigenous resources both published to the repository and retrieved to courses, will be measured by viewing the total number of learning objects and the Event Log within the repository at the end of each semester. Table A6 in the Appendix summarizes how each previously set goal will be measured and the frequency of each measurement. Once the data is evaluated it can then inform important next steps and Academy X can begin to accelerate.

***Acceleration.*** Now that Academy X has broke free of its inertia and has begun to mobilize, the organization will increase its momentum through the acceleration stage. The first process of acceleration is to help stakeholders develop new knowledge, skills, and abilities that support the change (Cawsey et al., 2016). As discussed, the LMS is a robust platform and if not implemented carefully can be too overwhelming for stakeholders. To put this into perspective, in my former role as a Training Specialist the first three months of my work were solely dedicated toward learning the platform. To accelerate, participants must first internalize the value of blended-learning and then master the technical skills that are necessary to implement this platform effectively in their classrooms. In this stage the change leader can utilize the following adaptive leadership behaviours regulate distress, maintain disciplined attention, and give the work back to the people previously introduced in Chapter 1 and discussed in detail in Chapter 2 (Heifetz et al., 2009). Moreover, to incorporate the Two-Eyed Seeing approach the platform will be introduced to school members as a vehicle to pay tribute to the past by ensuring the tools within the platform are utilized to value both Indigenous and mainstream ways of knowing (Munrow et al., 2003). To ensure the stakeholders receive the appropriate amount of support, the change leader will also leverage the situational leadership approach. According to Hersey and



Blanchard (1988) “it is useful to keep in mind that there is no ‘one best way’ to influence others. Rather, any leader behavior may be more or less effective depending on the readiness level of the person are attempting to influence” (p. 181). Based upon their team members assessed levels of competence and commitment, the leader will deploy the most appropriate situational leadership style (delegating, participating, selling, telling). To master the technical skills required, in-person training will occur before the school year begins. Training and ongoing support will serve to provide stakeholders with not only the technical capabilities needed but also the pedagogical understandings required to effectively utilize the LMS tools in their classrooms.

To further mobilize Academy X, it is important to leverage appropriate tools to consolidate progress (Cawsey et al., 2016). Responsibility Charting is an important tool to showcase to stakeholders their responsibilities (Cawsey et al., 2016). A responsibility chart of each role’s responsibilities related to the change initiative is provided in Table A7 in the Appendix. Responsibility charting can also be supplemented with To-Do Lists. According to Cawsey et al., (2016), a To-Do List is simply a checklist of things to do to help stakeholders best plan for the change initiative. To ensure incremental LMS adoption that is transparent and manageable, after training has concluded The Semester Start Instructor and Incremental Ongoing Instructor to-do lists will be provided to teachers and are showcased in Table A8 and A9 in the Appendix. The Semester Start to-do-list is designed to walk teachers through setting up their blended courses at the beginning of each semester. After staffs’ courses have been setup, to provided consistency for all the stakeholders, the Incremental Ongoing Instructor to-do-list has been designed to communicate course expectations for future years. Finally, the remaining leadership behaviour from adaptive leadership previously introduced in Chapter 1 and discussed in detail in Chapter 2 is to protect leadership voices from below (Heifetz et al., 2009). To

complete the study stage of the PDSA cycle, the change leader must be sure they listen to all voices especially those who are against the change. These perspectives are invaluable to ensure multiple perspectives of the change initiative are heard to capture the full picture of the change implementation process.

**PDSA cycle: Act.** This final stage of the PDSA cycle is to act. The act stage is when changes are made and if appropriate the next cycle will begin (Moen & Norman, 2009). Based upon the analysis, Academy X will make appropriate changes and if needed will restart the PDSA cycle until the organization has fully transitioned from its current to its envisioned state.

***Institutionalization.*** As Academy X encroaches on its envisioned state, the remaining stage in the change path model is institutionalization. Cawsey et al. (2016) maintains the first component of institutionalization involves the change leader tracking progress. Gauging change can help to clarify expectations, adjust, assess buy-in, and guide future initiatives (Cawsey et al., 2016). Situational leadership acknowledges the importance of periodically reassessing progress, especially amongst its stakeholders. As much as it was important to assess stakeholders' initial development levels, stakeholders will not remain static throughout a change initiative. According to Hersey and Blanchard (1988) followers can easily move back and forth along readiness levels (unable and unwilling, unable but willing, able but unwilling, and able and willing). To ensure proper alignment, leader's leadership behaviours must move with their followers' level of readiness. Similarly, adaptive leadership also views change as not linear but instead a process. According to Heifetz et al. (2009) adaptive leadership will often require a combination of many previously mentioned leadership behaviours simultaneously or interdependently all throughout the change process. As progress is tracked throughout the change, applicable adaptive and

situational leadership behaviours will continue to be deployed. To further measure the progress of the change, the balanced score card, data sets, and staff audits will be leveraged.

All forms of tracking will be created, administrated, and collected by the change leader. The Balanced Scorecard “integrates measures into a relatively simple way of tracking the critical success factors” (Cawsey et al., 2016, p. 452). This tool is adapted to an educational context and will be completed at the end of the school year to gauge progress of the goals of the planned change. In addition to the balanced scorecard, D2L’s Data Hub will be used as an additional measure. As discussed, D2L’s Data Hub tool will utilize a variety of data sets that allow the change leader to track the adoption rate of teachers, students, and parent/guardians. These reports will be generated throughout the school year and will be utilized to track login history, tool engagement, and credit accumulation. As also conveyed, to further measure tool engagement and ensure the curriculum is Indigenized, a Google Sheet will be created to capture results of staff audits. The audits will be performed when the change leader meets bi-weekly with staff and will be recorded monthly to track and evaluate how well Academy X is satisfying its MIS requirements and overall adopting the LMS. These results will also be a criteria of staff’s performance appraisals. Lastly, school inspections from the MOE are expected to occur annually and will likewise be used to monitor and evaluate this change and inform important next steps.

Now that a plan to effectively track the progress of the change has been established, the final step of institutionalization is to develop new structures, processes, and skills needed. Many processes and practices within Academy X from this change initiative will inevitably change for stakeholders. Some new processes and practices in the LMS are digitally completing forms, posting school-wide announcements and events in the calendar, creating and engaging with the instructor tools, creating digital learning resources, monitoring the progress of students based

upon their digital footprint, and digitally assessing and evaluating students. As stakeholders develop these new skills and processes, institutionalization will over time occur. As this final stage of the change path model concludes, it is important to remember that “Change management is not something you simply deal with, then can ignore. Rather, it is a continuing process of seeking to understand what is going on and what is needed” (Cawsey et al., 2016, p. 375). For this reason, after the institutionalization stage, Academy X may restart the PDSA cycle until it has reached its envisioned state.

**Change process monitoring and evaluation summary.** This section outlined how this change initiative’s progress will be tracked, assessed, and refined. The do, study, and act stages from the PDSA cycle, and the acceleration and institutionalization stages from the change path model were utilized as a framework to construct the change process monitoring and evaluation section. In the do and study stages how to carry-out the plan, the anticipated and unexpected issues, and how the data collected will be analyzed against previous goals established were discussed. In the acceleration stage new knowledge skills and abilities will be fostered amongst staff, and both responsibility charting and to-do-lists will be utilized as tools to consolidate progress. In the remaining act stage, necessary changes will be made and the next PDSA cycle will restart until Academy X arrives at its envisioned state. Finally, within the remaining institutionalization stage, progress will be tracked and refined utilizing the balanced scorecards, data sets, and staff audits will be performed. As much as measurement measurements matter, communicating the change effectively is also a pivotal component in this OIP.

### **Plan to Communicate the Need for Change and the Change Process**

Communication is inextricably linked to a change initiative’s success. Communication can be directly responsible for hindering or propelling a change initiative (McClellan, 2011).

Saruhan (2014) reinforces this notion stating, “Poor communication is regarded as one of the main antecedents of resistance to change” (p. 149). Effective communication is pertinent within a change initiative for a plethora of reasons including lessening uncertainty among stakeholders, generating shared meaning, managing perceptions, creating a sense of control, engagement, turnover, stronger long-term commitment, and enhancing job satisfaction (Allen, Jimmieson, Bordia, & Irmer, 2007; Bordia, Hunt, Paulsen, Tourish, & DiFonzo, 2004; Dufrene & Lehman, 2014). The importance of communication is perhaps best underscored by Barrett (2002) stating “Effective employee communication is the glue that holds an organization together, and during major change, that glue becomes even more critical” (p. 231). Communication is important throughout the entire change process. Therefore, the plan to communicate the need for change and the change process are organized into the phases of communicating change, aligned with the stages of the change path model, and complimented with strategies from the strategic employee communication model. The strategic employee communication model was developed to aid management in understanding the pertinent role communication plays in the day-to-day operation of an organization throughout a major change initiative (Barrett, 2002). Strategies from this model will be utilized to reinforce the communication plan. The plan to communicate the need for change and the change process are summarized in Table 10.

Table 10

*Plan to Communicate the Need for Change and the Change Process*

Need for Change & Change Process	Phases of Communicating Change	Change Path Model	Strategic Employee Communication Model	Communication Channels	Timeline
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Plan for Building Awareness of the Need for Change	Prechange	Awakening	Strategic Objectives	(e.g. Senior Leadership Meetings, Steering Committee Meetings)	Beginning Semester 2 January
	Supportive Management				
Developing the Need for Change	Mobilization	Effective Media/Forums	Targeted Messages	(e.g. Town Hall Meetings, Face to-Face, Email, Broadcast Media Communications, Written Methods).	End of Semester 2 May-June
Plan to Communicate Clearly and Persuasively to Relevant Audiences	Midstream Change	Acceleration	Well Positioned Staff	(e.g. Individual Basis One-on-One Bi-Weekly, Department/Staff Meetings).	Beginning of Semester 2 to End of Semester Two Monthly
	Ongoing Assessment				
Confirming the Change	Institutionalization	Integrated Process		(e.g. Senior Leadership, Steering Committee, Town Hall, Department/Staff, Annual Report).	End of Year May-June

**Plan for building awareness of the need for change.** The plan to communicate change begins with building awareness of the need for change. According to Cawsey et al. (2016) “The change process won’t energize people until they begin to understand the need for change” (p. 94). The plan for building awareness of the need for change is comprised of the prechange phase of communicating change aligned with the awakening stage of the change path model and is reinforced by strategic objectives and supportive management from the strategic employee communication model. Afterwards, to continue to build awareness of the need for change, the developing the need for change phase associated with the mobilization stage from the change

path model and supported with effective media forms and targeted messages from the strategic employee communication model will be discussed.

*Prechange and awakening strategies.* The prechange phase is centered on the change agent first convincing top management and then the staff that the change is warranted (Cawsey et al., 2016). Communication in the awakening stage is centered on identifying and validating the need for change. The components of the awakening stage that are applicable to the prechange phase are: spread awareness of the data and the gap throughout the organization, develop a powerful vision for change, and spread the need for change (Cawsey et al., 2016). In this phase, the change initiative will be introduced to the steering committee well in advance of the change being implemented. To showcase the present gap and opportunity of the change, previously discussed external and internal issues will be captured and showcased to leadership. To develop a powerful vision for change, it must convey purpose, strategy, and elements of organizational culture (Lipton, 1996). The purpose is to increase LMS adoption, the strategy is to leverage the previously discussed solution of incremental adoption, and finally the organizational culture must embrace the Two-Eyed Seeing approach by valuing both mainstream and Indigenous knowledges. To increase a vision's stickiness, the message needs to not only convey the previous data but also the potential impact of the change. For instance, this change will not only satisfy Academy X' MIS requirements, but more importantly through the Two-Eyed Seeing approach it will also increase Indigenous student success. To create a shared sense of vision, change leaders are encouraged to actively engage and involve employees in the development and communication of the vision to arrive at a shared sense of purpose (Jorgensen, Owen, & Nues, 2008). As discussed, scheduling sessions with stakeholders in the school and the community to share their ideas will further contribute toward creating a shared sense of understanding amongst

staff. Through this approach, the school and most importantly the students will immensely benefit from Indigenous educators and community members expertise, which will further contribute toward further adopting the Two-Eyed Seeing approach (Munroe et al., 2013).

*Strategic objectives and supportive management strategies.* In addition to the awakening strategies from the change path model, to continue to build awareness both strategic objectives and supportive management are applicable strategies from the employee communication model strategy to aid in the prechange phase. Strategic objectives ensure the organization's objectives are aligned to the change's objectives (Barrett, 2002). At Academy X, increasing LMS adoption needs to be positioned to senior leadership to achieve Academy X's goals (support student success & mobilize Indigenous knowledges). Additionally, supportive management refers to management being directly involved (Barrett, 2002). Opportunities to engage senior leadership at Academy X may include soliciting their expertise, requesting their participation in the change initiative, and informing them of ongoing updates. Aligning this change to strategic objectives of the organization in tandem with a concert of supportive management strategies will collectively build awareness for the need for change.

*Developing the need for change and mobilization strategies.* After completing the prechange phase, the next phase is developing the need for change. This phase is focused on explaining the reason for change, reassuring team members, and clarifying steps in the change process (Cawsey et al., 2016). Communication in the mobilization stage is similarly focused on communicating the change organization-wide. The characteristics of the mobilization stage that are most applicable to the developing the need for change phase are communicating the need for change throughout the entire organization and managing stakeholders' reactions (Cawsey et al., 2016). To create a shared sense of vision, change leaders are encouraged to actively engage and



involve employees and community members in not only the development but also the communication of the vision (Jorgensen et al., 2008). This approach is consistent with the leadership approach of the organization (participatory democracy) and the Indigenous worldview (Two-Eyed Seeing). Consequently, staff members will be provided with opportunities to both develop and then communicate the vision. Managing stakeholders' reactions was discussed in depth within the change implementation plan. The focus of this section will be on communicating the need for change throughout the organization. This phase will be communicated at the end of the school year in preparation for the following school year so staff will have adequate notice and time to prepare for this change. The change will be communicated through multiple communication channels with an emphasis on interpersonal communication methods. According to Rogers (2003) interpersonal communication channels are most effective when communicating a change. Some communication channels in this phase include town hall, department, and one-on-one meetings. Additionally, interpersonal communication channels will be supplemented with email communications, broadcast media communications, and various written methods. To communicate the need for change, instead of relying on the informal organizational grapevine which has the propensity to result in inaccuracies, management needs to be the first and continued source of information (Dufrene & Lehman, 2014). Change leaders are encouraged to use many forms of communication when communicating a change (Barrett, 2002); however, various communication channels can often result in confusion (Nelson, 2007). Communication throughout the organization can be both informal and formal. According to Saruhan (2014) informal communication channels (e.g. social gatherings) are less structured; whereas, formal communication channels (e.g. annual reports) are established by the organization to transmit messages. Although it can be difficult to control informal

communication channels, Academy X will strategically communicate through formal channels and in the event of confusion will encourage stakeholders to rely on management as their sources of information. Additionally, formal communication within an organization's hierarchy can flow vertically or horizontally (Saruhan, 2014). Regardless of the channel or direction, communication of the change needs to be consistent at all levels of the company but also meaningful to everyone by aligning the change to each role's responsibilities (Barrett, 2002). The organization-wide goal of this change initiative is increasing LMS adoption to enhance teaching and learning. Vertical communication moving up the hierarchy to senior leadership will communicate the change with an emphasis on how they can allocate time, resources, and support the goal. Vertical communication moving down the hierarchy to teachers, supports staff, and eventually students will be positioned as how they can utilize the LMS's instructor tools to do their part. An example of horizontal communication can be viewed as communicating with stakeholders/guardians which can be framed as by auditing their child's progress they can fulfill their role. As messages are tailored to each audience but still contribute to the organization-wide goal, Academy X will effectively communicate this change initiative across the organization.

*Effective media/forums & targeted messages.* In addition to the mobilization strategies from the change path model, effective media/forum and target messages from the employee communication model strategy are strategies that reinforce developing the need for change. The effective media/forums strategy encourages organizations to use all vehicles to reach is audiences, with again an emphasis on the importance of interpersonal contact (Barrett, 2002). In addition to the previously discussed forms of interpersonal communication, Academy X aims to utilize many additional channels within the organization including email communications, broadcast media communications, and written methods.

**Communicating clearly and persuasively.** Equally important to building awareness of the need for change is the plan to communicate the change process clearly and persuasively to relevant audiences. According to Dufrene and Lehman (2014) communication needs to occur not only at the beginning of the change process but also throughout. The plan to communicate clearly and persuasively to relevant audiences is first comprised of the midstream change phase of communicating change aligned with the acceleration stage from the change path model and is reinforced by well positioned staff and ongoing assessment from the strategic employee communication model. To further ensure the change is carefully communicated clearly and persuasively, the confirming the need for change phase of communicating change is paired with the institutionalization stage from the change path model and supported with the integrated process from the strategic employee communication model.

***Midstream change and acceleration strategies.*** The midstream change phase is concerned with communicating plans to inform stakeholders of progress, clarify misconceptions, and explain new roles and processes (Cawsey et al., 2016). Communicating within the acceleration stage is primarily focused on supporting the development of new understandings. The components of the acceleration stage that are most relevant to the midstream change phase are manage the transition and celebrate small wins and achievements of milestones (Cawsey et al., 2016). This phase in the change process will begin at the beginning of implementation and carry-on throughout the change process (beginning of semester one to end of semester two). In monitoring the change, individual misconceptions and new processes will be updated during bi-weekly one-on-ones and collective progress, misconceptions, and new processes will be communicated monthly face-to-face in staff meetings. In this manner, individual inquires, misconceptions or concerns will be effectively dealt with on an individual basis while collective

updates will be communicated efficiently as a group. Staff meetings will also be the best suitable environment to celebrate small wins and the achievement of milestones. Examples of small wins at Academy X may include, teachers effectively leveraging instructor tools, students interacting with the tools, or parents/guardians accessing the program. Additionally, to maintain the Two-Eyed Seeing approach a standing discussion topic of how staff are Indigenizing their online learning experiences will be added to the recurring monthly staff meeting agenda. Some sample milestones may include reaching mid-terms, completing a semester, or successfully completing a MoE inspection. To celebrate both small wins and milestones, change participants can be recognized in many ways including: verbal praise, certificates, organizational swag, formal awards, or the ability to attend a related conference.

*Well positioned staff, ongoing assessment.* To reinforce these acceleration strategies, well positioned staff and ongoing assessment are two additional strategies from the strategic employee communication model that can be utilized. According to Barrett (2002) well-positioned staff suggests that if communication staff are going to be able to effectively communicate the change, they must have a seat at the table. Academy X is fortunate to have a Communications Manager who is responsible for all media releases and social media communications. Additionally, the Community Cultural Coordinator, and Social Support Worker both attend many community-related events and communicate school initiatives with the community. To ensure the change initiative is effectively being communicated outside of the organization, these individuals need to be present during preliminary planning sessions and ongoing monthly staff meetings when important progresses of the change are discussed. Additionally, Barrett (2002) maintains ongoing assessment refers to the organization's communication and must be measured clearly against defined goals throughout key stages of the

change. Assessment at Academy X needs to focus on not only the previous goals of the planned change (outlined in the monitoring and evaluation section) but also needs to be mindful of how the communication of the change is being understood throughout the organization along milestones of the school year (end of each semester). Establishing feedback loops where participants are asked survey questions about how well they understand both the need for change and the change process at Academy X will aid in assessing if these messages are being communicated clearly, where gaps may exist, and overall if the change is being understood throughout the organization as intended.

*Confirming the change and institutionalization strategies.* After the midstream change phase has been completed, the final phase that remains is to confirm the change. Instead of assessing the change, the confirm change phase communicates the evaluation of the change and celebrates the change. Communication within the institutionalization stage, is primarily focused on expressing final evaluations throughout the organization and aiding the organization with developing its new stability. The institutionalization strategies that are most applicable to the confirming the change phase are tracking the change and developing new stability within the organization. Both sections were also discussed in the previous change process and monitoring and evaluation section but, now will be touched upon to inform how the evaluation and new stability will be communicated throughout the organization. The results and next steps at Academy X will be communicated at the end of the schoolyear and will be through formal channels including senior leadership and steering committee meetings, town hall meetings, staff meetings, and within the organization's annual report. A special emphasis will also be given to showcasing the amount of Indigenous resources collected and utilized in staff's online courses.

*Integrated process.* To further aid Academy X in finalizing its transition to its envisioned state, the integrated process is another worthwhile strategy. According to Barrett (2002) communication needs to be added to management's discussions related to strategic organizational objectives and future planning. As this change initiative is given careful consideration at future management discussions (annual visionary-mapping meetings, steering committee meetings etc.) results of Academy X's change efforts (structures, systems, processes) will become embedded and crystalized throughout the organization.

**Conclusion.** The plan to communicate the need for change and the change process centered on the plan to build awareness of the need for change and the plan to communicate clearly and persuasively to relevant audiences. To form the plan to communicate the need for change and the change process, building awareness of the need for change and communicating clearly and persuasively to relevant audiences were discussed. Building awareness of the need for change began with the prechange phase aligned with the awakening stage and supplemented with the strategic objectives and supportive management strategies. The second component of building awareness of the need for change was developing the need for change linked with the mobilization stage and complimented with the effective media/forums and targeted messages strategies. After discussing the plan for building awareness of the need for change, the plan to communicate clearly and persuasively with relevant audiences was outlined. This first component of communicating clearly and persuasively with relevant audiences began with the midstream change phase aligned with the acceleration stage of the change path model and enhanced with the well positioned staff and ongoing assessment strategies of the strategic employee communication model. Finally, confirming the need for change associated with the institutionalization stage and accompanied with the integrated process strategy was discussed.

Now that the plan to communicate the need for change and the change process has been outlined, this OIP will conclude with next steps and future considerations.

### **Next Steps and Future Considerations**

Next steps for Academy X center on sustainability and further increasing LMS adoption. The act stage in PDSA cycle, the institutionalization stage of the change path model and the adaptive and situational leadership approaches all encourage the change leader to continuously gauge progress and then if necessary, plan applicable next steps (Cawsey et al., 2016; Northouse, 2016). As the change leader continues to monitor and evaluate the change, they can safeguard the ground that this change initiative has already gained and set new goals for enhanced progress. As a result of beginning to implement this OIP, Academy X has recently been recognized as one of five recipients of D2L's annual teaching and learning excellence awards. According to D2L Excellence Awards (2020) "The D2L Excellence Awards recognize educators, trainers and leaders in employee engagement who have used the Brightspace platform to deliver learning experiences that are innovative, collaborative, or have made an extraordinary impact on learning outcomes" (para. 1). Considering how D2L has over 1300 clients world-wide and Academy X's staff and student population is very small relative to their other clients, it is an immense privilege to be a recipient of this award and to be in the same category as the other educational organizations who were similarly recognized. As much as this award is a testament to this change initiatives early success, additional goals need to be set to ensure Academy X safeguards the progress it has gained and over time continues to move closer to its envisioned state.

**Embracing the complexities of change.** We are living in exponential times. According to Tsoukas and Chia (2002) change needs to be thought of as a normal condition of life. Cawsey et al., (2016) supports this notion stating, "It is not the strongest of the species that survive, nor the most intelligent, but the most responsive to change" (p. 22). If organizations in the twenty-

first century have any hope at surviving let alone thriving, leaders and organizations alike must not underestimate the complexities of change or ever become static. Morgan (2006) encourages individuals to view organizations as a whirlpool in a river. A whirlpool in a river is stagnant; however, a continuous flow of water is constantly reshaping the whirlpool. As organizations are viewed as a whirlpool being perpetually in flux, they will be equipped to deal with the waves of imminent changes and their accompanying complexities. Academy X will adopt this mindset and will remain in a steadfast position poised to address the imminent waves of change as they come.

**Conclusion: Organizational improvement plan.** Chapter 1 Introduction and Problem discussed the following: organizational context, leadership position and lens statement, leadership PoP, framing the PoP, guiding questions emerging from the PoP, leadership-focused vision for change, and organizational change readiness. Chapter 2 Planning and Development outlined: the conceptual framework, leadership approach to change, critical organizational analysis, possible solutions to address the PoP, and leadership ethics and organizational change. Finally, Chapter 3 Implementation, Evaluations, and Communication provided a change implementation plan, plan to communicate the need for change and the change process, and concluded with next steps and future considerations.

This OIP is most applicable to organizations who are interested in implementing or adopting a LMS in a K-12 context and are looking for direction in undergoing this change initiative themselves. Although only approximately 5% of Ontario high school students are taking online-courses, the provincial government has mandated that 4 out of 30 credits that students need to earn their diploma need to be e-learning credits (Jones, 2019). LMSs are anticipated to continue and have an even bigger presence in learning. Outside of Ontario, recent LMS global market projections now suggest the global LMS market size is expected to grow



from \$9.2 billion in 2018 to a staggering \$22.4 billion by 2023. The recent pandemic caused by the COVID-19 virus has also underscored globally the importance of online learning (D’Mello, 2020). As the world continues to work together to resolve this pandemic, forms of online learning like the ones discussed in this OIP will be utilized and usage will continue to increase globally. Even as this global pandemic fades, this unique moment in history will cement online learning in its place in education and organizations alike throughout the world. Although centered on a K-12 setting, this research is applicable to Higher Education and Enterprise organizations that are also interested in increasing their LMS adoption. Academy X’s affiliate College X is in a prime position to reap the benefits of this OIP to advance their own LMS adoption. Recently, College X has expressed interest with taking on this initiative themselves to similarly reap the benefits of online learning. If they choose to similarly take on this endeavour, this change could prompt the creation of an entire LMS department within the existing organization structure made up of a variety of LMS roles including director, administrator, trainer, instructional designer, and support. Regardless of what stage organizations are in with adopting a LMS, this OIP has merit for any organization interested in increasing LMS adoption within their organization. Aside from showcasing the value of online learning, this OIP also showcases and encourages more organizations throughout the world to continue to incorporate the Indigenous worldview throughout their organizations to enhance the educational outcomes of students. Online learning is a valuable form of educational technology that can serve to rekindle Indigenous knowledges to pay tribute to the past. This sentiment is perhaps best expressed by Castellano (2002) stating “The knowledge that will support survival in the future will not be an artifact from the past. It will be a living fire, rekindled from surviving embers and fueled with the materials of the twenty-first century” (p. 34).

## References

- Academy X. (2018-2019). Academy X handbook and course calendar.  
Retrieved from [URL removed to anonymize Academy X]
- Academy X. (2019). Academy X handbook and course calendar. Retrieved from [URL removed to anonymize Academy X]
- Academy X. (2019-2020). Staff manual. Retrieved from [URL removed to anonymize Academy X]
- Adom, Dickson, Hussein, Emad &, Adu--Agyem. (2018). Theoretical and conceptual framework: Mandatory ingredients of a quality research. *International Journal of Scientific Research*. 7. 438-441.
- Al-busaidi, K., & Al-shihi, H. (2012). Key factors to instructors' satisfaction of learning management systems in blended learning. *Journal of Computing in Higher Education*, 24(1), 18-39. doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1007/s12528-011-9051-x
- Allen, J., Jimmieson, N. L., Bordia, P., & Irmer, B. E. (2007). Uncertainty during organizational change: Managing perceptions through communication. *Journal of Change Management*, 7, 187-210. doi:10.1080/14697010701563379
- Alvesson, M., & Spicer, A. (2011). *Metaphors we lead by: Understanding leadership in the real world*. London & New York: Routledge.
- Archbald, D. (2008). Research versus problem solving for the education leadership doctoral thesis: Implications for form and function. *Educational Administration Quarterly*, 44(5), 704-739.
- Armenakis, A.A., & Harris, S.G. (2009). Reflections: our journey in organizational change research and practice. *Journal of Change Management*, 9(2), 127-142.
- Aronson, E. (2001). Integrating Leadership Styles and Ethical Perspectives. *Canadian Journal of*

- Administrative Sciences*, 18, 244-256. Retrieved from <https://doi.org/10.1111/j.1936-4490.2001.tb00260.x>
- Aslan, S., & Reigeluth, C. M. (2011). A Trip to the past and future of educational computing: Understanding its evolution. *Contemporary Educational Technology*, 2(1), 1-17. Retrieved from <http://www.cedtech.net/articles/21/211.pdf>
- Avolio, B.J., & Locke, E.E. (2002). Contrasting different philosophies of leader motivation: Altruism versus egoism. *Leadership Quarterly*, 13, 169-191.
- Bacchi, C. (2012). Why study problematizations? Making politics visible. *Open Journal of Political Science*, 2(1), 1-8.
- Barrett, D. (2002). Change communication: using strategic employee communication to facilitate major change. *Corporate Communications: An International Journal*, 7(4), 219-231. <https://doi.org/10.1108/13563280210449804>
- Battiste, M., & Henderson, J. (. Y. (2009). Naturalizing indigenous knowledge in eurocentric education. *Canadian Journal of Native Education*, 32(1), 5-18,129-130. Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/755262421?accountid=15115>
- Bedford, D., & Workman, T. (1997). The Great Law of Peace: Alternative Inter-Nation(al) Practices and the Iroquoian Confederacy. *Alternatives: Global, Local, Political*, 22(1), 87-111.
- Belzer, A., & Ryan, S. (2013). Defining the Problem of Practice Dissertation: Where's the Practice, What's the Problem? *Planning & Changing*, 44(3/4), 195-207.
- Black, E. W., Beck, D., Dawson, K., Jinks, S., & DiPietro, M. (2007). The other side of the LMS: Considering implementation and use in the adoption of an LMS in online and blended learning environments. *TechTrends*, 51(2), 35-39, 53. Retrieved from

- <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/223126683?accountid=15115>
- Bomberry, M. (2013). Negotiating two worlds: Learning through the stories of [Indigenous group removed to anonymize Academy X] youth and adults. *Canadian Journal of Education*, 36(2), 248-283
- Bonk, C. J. (2009). *The world is open: How web technology is revolutionizing education*. San Francisco, CA: Jossey-Bass.
- Bordia, P., Hunt, E., Paulsen, N., Tourish, D. and DiFonzo, N. (2004), Uncertainty during organizational change: is it all about control?, *European Journal of Work and Organizational Psychology*, 13, 345-65. doi: 10.1080/13594320444000128.
- Bowen, C., Bessette, H., & Chan, T.C. (2006). Including ethics in the study of educational leadership. *Journal of College & Character*, 7(7), 1-8.
- Bozkurt, A., Akgun-Ozbek, E., Yilmazel, S., Erdogdu, E., Ucar, H., Guler, E., ... Aydin, H. A. (2015). Trends in distance education research: A content analysis of journals 2009–2013. *International Review of Research in Open and Distributed learning*, 16(1), 330–363.
- Brewer, B., & Lam, G. K. Y. (2009). Conflict handling preferences: A public-private comparison. *Public Personnel Management*, 38(3), 1-14. Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/215945093?accountid=15115>
- Butler, J., Scott, F., & Edwards, J. (2003). Evaluating Organizational Change: The Role of Ontology and Epistemology. *Journal of Critical Postmodern Organizational Science*. 2 (2), 55-67.
- Carnegie Project on the Education Doctorate. (2016). About us. Retrieved from <http://www.cpedinitiative.org/page/AboutUs>

- Carvalho, A., Areal, N., & Silva, J. (2011). Students' perceptions of blackboard and moodle in a Portuguese university. *British Journal of Educational Technology*, 42(5), 824-841. Doi: 10.1111/j.1467-8535.2010.01097.x
- Castellano, M. (2000). Updating aboriginal traditions of knowledge. In B. Hall, G. Dei, & D. Rosenberg (Eds.), *Indigenous knowledges in global contexts: Multiple readings of our world* (pp. 21-36). Toronto, ON: University of Toronto Press.
- Cawsey, T.F., Deszca, G., & Ingols, C. (2016). *Organizational change: An action-oriented toolkit* (3rd ed.). Thousand Oaks, CA: Sage.
- Ceylan, V. K., & Kesici, A. E. (2017). Effect of blended learning to academic achievement. *Journal of Human Sciences*, 14(1), 308-320. Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/2228672906?accountid=15115>
- Chang, R. (2016, July 28). Learning management system market expected to grow \$10.5 billion in next 5 years. *The Journal*. Retrieved from <https://thejournal.com/>
- College X. (2013). College X personnel policy. Retrieved from [URL removed to anonymize Academy X]
- College X. (2017-2018). College X annual report. Retrieved from [URL removed to anonymize Academy X]
- Desire2Learn. (2018). Brightspace for parents. Retrieved from [https://documentation.brightspace.com/EN/le/brightspace\\_for\\_parents/parent/about\\_brightspace\\_for\\_parents.htm?Highlight=Brightspace%20for%20Parents](https://documentation.brightspace.com/EN/le/brightspace_for_parents/parent/about_brightspace_for_parents.htm?Highlight=Brightspace%20for%20Parents)
- Desire2Learn. (2018). Brightspace learning repository collections. Retrieved from <https://community.brightspace.com/s/article/Brightspace-Learning-Repository-collections>
- Desire2Learn. (2018). Creating a custom certificate. Retrieved from

- <https://community.brightspace.com/s/article/AWARDS-Creating-a-Custom-Certificate>  
Desire2Learn. (2018). What is continuous delivery? Retrieved from  
<https://community.brightspace.com/s/article/What-is-Continuous-Delivery>
- Desire2Learn. (2019). About advanced data sets. Retrieved from  
[https://documentation.brightspace.com/EN/insights/data\\_hub/admin/ads\\_intro.htm](https://documentation.brightspace.com/EN/insights/data_hub/admin/ads_intro.htm)
- Desire2Learn. (2019). Brightspace portfolio. Retrieved from  
<https://community.brightspace.com/s/article/Brightspace-Portfolio-Instructor-Guide>
- Desire2Learn. (2019). D2L brightspace for schools – D2L Inc. Retrieved from  
<http://www.siiia.net/codie/2019-Winners-Finalists/2019-Winners/Details/nID/813>
- Desire2Learn. (2019). D2L excellence awards. Retrieved from  
<https://www.d2l.com/excellence-awards/>
- Desire2Learn. (2019). How can you use a blind marking method in quizzes? Retrieved from  
<https://community.brightspace.com/s/article/000009235>
- Desire2Learn. (2019). How to create custom widgets? (2019). Retrieved from  
<https://community.brightspace.com/s/article/KBL931000748>
- Desire2Learn. (2019). Learning environment instructor tools agenda. Retrieved from  
<https://learnstore.brightspace.com/catalog?pagename=Learning-Environment-Instructor-Tools-Private>
- Desire2Learn. (2020). About brightspace data sets. Retrieved from  
[https://documentation.brightspace.com/EN/insights/data\\_hub/admin/bds\\_intro.htm](https://documentation.brightspace.com/EN/insights/data_hub/admin/bds_intro.htm)
- Creswell, J. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston, MA: Pearson Education
- Davis, F. D. (1989, September). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Deloitte. (2018). [Title removed to anonymize Academy X] Retrieved from [URL removed to

anonymize Academy X]

- Deming WE (1983) *Out of the Crisis*. Massachusetts Institute of Technology Centre for Advanced Engineering Study xiii: Cambridge, MA, 1999, 507.
- De Smet, C., Schellens, T., De Wever, B., Brandt-Pomares, P., & Valcke, M. (2016). The design and implementation of learning paths in a learning management system. *Interactive Learning Environments*, 24(6), 1076-1096.  
doi:<http://dx.doi.org.proxy1.lib.uwo.ca/10.1080/10494820.2014.951059>
- Dickson, M. W., Castano, N., Magomaeva, A., & Den Hartog, D. N. (2012). Conceptualizing leadership across cultures. *Journal of World Business*, 47(4), 483-492.
- D'Mello, C. (2020, March 28). Ontario launches online learning for students at home during COVID-19 pandemic. *CTV News*. Retrieved from <https://toronto.ctvnews.ca/>
- Dobre, I. (2015). Learning management systems for higher education – An overview of available options for higher education organizations. *Procedia Social and Behavioral Sciences*, 180 (The 6th International Conference Edu World 2014 “Education Facing Contemporary World Issues”, 7th-9th November 2014), 313-320. doi: 10.1016/j.sbspro.2015.02.1222.
- Dousay, T. (2015). Conversations with innovators in learning and technology. *Techtrends: Linking research & practice to improve learning*, 59(4), 18-21. doi:10.1007/s11528-015-0867-5
- Dudar, L., Scott, S. and Scott, D. (2017), Stakeholders and change participants – important influencers, *accelerating change in schools: leading rapid, successful, and complex change initiatives (Advances in Educational Administration, Vol. 27)*, Emerald Publishing Limited, pp. 45-72.

- Dufrene, D., & Lehman, C. (2014). Navigating change: Employee communication in times of instability. *Business and Professional Communication Quarterly*, 77(4), 443–452.
- Ellis, Robert A., and Rafael A. Calvo. 2007. Minimum indicators to assure quality of LMS-supported blended learning. *Journal of Educational Technology & Society*, 10, (2), <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/1287039628?accountid=15115> (accessed June 21, 2018).
- Fitzsimmons, K. (2016). Supporting blended learning teachers. *The Morning Watch*, 44(1), 1. Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/2118377465?accountid=15115>
- Friedman, H. H., & Friedman, L. W. (2011). Crises in education: Online learning as a solution. *Creative Education*, 2(3), 156-163. doi:10.4236/ce.2011.23022
- Fullan, M. (2006). The future of educational change: System thinkers in action. *Journal of Educational Change*, 7(3), 113-122.
- Furda, M., & Straka, D. (2016). A study of student interaction with online course content provided through a learning management system in a high school science classroom: Implications for educators. *Excellence in Education Journal*, 5(1), 4-23. Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/2228690217?accountid=15115>
- Gautreau, C. (2011). Motivational factors affecting the integration of a learning management system by faculty. *Journal of Educators Online*, 8(1).
- Gore, M. S. (2003). Strategies leaders should use to respond to hostile questions



- regarding organizational changes: An empirical investigation (Unpublished master's thesis). Air Force Institute of Technology, Dayton, OH. Retrieved from <http://www.dtic.mil/docs/citations/ADA413116>
- Gutiérrez-Carreón, G., Daradoumis, T., & Jorba, J. (2015). Integrating learning services in the cloud: An approach that benefits both systems and learning. *Educational Technology & Society*, 18(1), 145-157.
- Gutman, L. M., & McLoyd, V. C. (2000). Parents' management of their children's education within the home, at school and in the community: An examination of African American families living in poverty. *Urban Review*, 32, 1–24.
- Hall, G. E., Wallace, R. C., Jr., & Dossett, W. A. (1973). A developmental conceptualization of the adoption process within educational institutions. Austin, Texas: University of Texas Research and Development Center for Teacher Education, 1973. ERIC no. Ed 095 126.
- Hall, G. E. (1979). The concerns-based approach to facilitating change. *Educational Horizons*, 57, 202-208.
- Hall, G. E., & Hord, S. M. (2011). *Implementing change: Patterns, principles, and potholes*. (3rd ed.). Upper Saddle River, NJ: Pearson Education.
- Hallam, T. A., & Hallam, S. F. (2009). Combining an exciting classroom learning environment with an effective computerized learning management system. *Journal of Applied Research for Business Instruction*, 7(2), 2-9. Retrieved from Business Source Complete Database. (Accession No. 37836114)
- Hamuy, E., & Galaz, M. (2010). Information versus communication in course management system participation. *Computers & Education*, 54(1), 169-177. doi: 10.1016/j.compedu.2009.08.001
- Hare, J. (2004). They beat the drum for me. *Education Canada*, 44(4) (Fall), 17-20.
- Hatcher, A., Bartlett, C., Marshall, A., & Marshall, M. (2009). Two-eyed seeing in the classroom environment: Concepts, approaches, and challenges. *Canadian Journal of Science, Mathematics and Technology Education*, 9(3), 141. Retrieved from <https://www-lib-uwo->

ca.proxy1.lib.uwo.ca/cgi-

bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/838797806?

accountid=15115

- Hazen, B. T., Wu, Y., Sankar, C. S., & Jones-Farmer, L. (2012). A proposed framework for educational innovation dissemination. *Journal of Educational Technology Systems*, 40(3), 301-321. doi: 10.2190/ET.40.3.f
- Heifetz, R. A., Grashow, A., & Linsky, M. (2009). *The practice of adaptive leadership: Tools and tactics for changing your organization and the world*. Harvard Business Press
- Hersey, P., & Blanchard, K. H. (1988). *Management of organizational behavior: Utilizing human resources* (5<sup>th</sup> ed.). Englewood Cliffs, NJ: Prentice Hall.
- Hill, S. M. (2009). [Title removed to anonymize Academy X]  
*American Indian Quarterly*, 33(4), 479-498,601.
- Hogan, S., McCracken, K., & Eldinger, A., (2019, July 15). Appropriation vs. incorporation: Indigenous content in the canadian history classroom. *Active History*. Retrieved from <http://activehistory.ca/2019/07/appropriation-vs-incorporation-Indigenous-content-in-the-canadian-history-classroom/>
- Howell, J., & Higgins, C. (1990). Champions of change: Identifying, understanding and supporting champions of technological innovations. *Organizational Dynamics*, 19(1), 40-55.
- Hughes, M., (2011). Do 70 per cent of all organizational initiatives really fail? *Journal of Change Management*, 11, 45-464. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/14697017.2011.630506>
- IBM. (2019). In Canada, IBM volunteers help high school students on their six-year journey to a tech degree. *Stories of Service*. Retrieved from [URL removed to anonymize Academy X]

- Jacobs, H. (2010). *Curriculum 21: Essential education for a changing world*. Alexandria, VA: ASCD
- Januszewski, A., & Molenda, M. (Eds.). (2008). *Educational technology: A definition with commentary*. New York, NY: Lawrence Erlbaum Associates, Taylor & Frances Group
- Jick, T. (1993). The vision thing (A). In T. Jick, *Managing change* (pp. 142-148). Homewood, IL: Irwin.
- Joseph, L. (2007). The adoption and diffusion of computing and internet technologies in historically black colleges and universities. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses (Order No. 3244318).
- Johnson, R. (2017, November 8). Indigenous history, culture now mandatory part of Ontario curriculum. *CBS News*. Retrieved from <https://www.cbc.ca/>
- Johnson, R. (2018, February 5). Academy X praised in its pilot year. *CBC News*. Retrieved from [URL removed to anonymize Academy X]
- Johnson, R. (2019, April 6). On-the-land STEM program for high school credit to expand to northern Indigenous communities. *CBC News*. Retrieved from [URL removed to anonymize Academy X]
- Jones, A. (2019, April 8) Few Ontario high school students currently enrolled in e-learning courses: report. The Canadian Press. Retrieved from <https://www.cbc.ca/>
- Jorgensen, H., Owen, L., & Nues, A. (2008). *Making change work*. IBM Global Services. Retrieved May 2010 from <http://www-935.ibm.com/services/us/gbs/bus/pdf/gbe03100-usen-03-making-change-work.pdf>
- Kang, S. P. (2015). Change management: Term confusion and new classifications. *Performance Improvement*, 54(3), 26-32.
- Knowles, J. G., Squire F., & Cole A. L. (1999). Understanding teaching through inquiry into

- school contexts. *Journal of In-service Education*, 25:2, 367-380. doi:  
10.1080/136745589900200079
- Kotter, J. (2014). Seizing opportunities and dodging threats with a dual operating System. *Strategy & Leadership*, 42(6), pp. 10-12.
- Laho, N. S. (2019). Enhancing school-home communication through learning management system adoption: Parent and teacher perceptions and practices. *School Community Journal*, 29(1), 117-142. Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/2249688843?accountid=15115>
- Lambe, J., & Swamp, J. (2002). Effective cross-cultural dialogue: Challenges and opportunities. *McGill Journal of Education*, 37(3), 423.
- Langley, G. Moen, R., Nolan, K., Nolan, T., Norman, C., Provost, L. 2009. *The Improvement Guide, 2nd Edition*. Jossey-Bass, San Francisco.
- Laster, S. (2005). Model-driven design: Systematically building integrated blended learning experiences. *Journal of Asynchronous Learning Networks*, 8(5), 23-40.
- Laucius, J. (2019, March, 22). Ontario is poised to require every high school student take four online courses. What does it mean? *The Ottawa Citizen*. Retrieved from <https://ottawacitizen.com/>
- Lipton, M (1996, Summer). Demystifying the development of an organizational vision. *Sloan Management Review*, 86.
- Liu, F., & Cavanaugh, C. (2011). Success in online high school biology: Factors influencing student academic performance. *Quarterly Review of Distance Education*, 12(1), 37-54,71-72. Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi->

bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/920291750?  
accountid=15115

Lochner, B., Conrad, R., & Graham, E. (2015). Secondary teachers' concerns in adopting learning management systems: A U.S. perspective. *TechTrends*, 59(5), 62-70.

Lyytinen, K. & Damsgaard, J. (2001). What's wrong with the diffusion of innovation theory? The case of a complex and networked technology In. M. A. Ardis (Ed.), *Diffusing Software Products and Process Innovation* (pp. 173-190). Banff, Canada: Springer

Martín-Blas, T., & Serrano-Fernández, A. (2009). The role of new technologies in the learning process: Moodle as a teaching tool in Physics. *Computers & Education*, 52(1), 35-44.  
doi: 10.1016/j.compedu.2008.06.005

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach*. Thousand Oaks, Calif: SAGE Publications.

McClellan, J. (2011). Reconsidering Communication and the Discursive Politics of Organizational Change. *Journal of Change Management*, 11(4), 465–480.

McIntyre, C. (2017, November 24). Read Justin Trudeau's apology to residential school survivors in Newfoundland. *Macleans*. Retrieved from <https://www.macleans.ca/>

Miller, J. R. (2016). Canada's residential schools. volume I, part I: The history, origins to 1939/Canada's residential schools. volume I, part 2: The history, 1939 to 2000/Canada's residential schools. volume 2: The inuit and northern Experience/Canada's residential schools. volume 3: The métis Experience/Canada's residential schools. volume 4: Missing children and unmarked Burials/Canada's residential schools. volumes 5: The Legacy/Canada's residential schools. volume 6: Reconciliation. *BC Studies*, (191), 169-175. Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/1836863371?accountid=15115>

- Ontario Ministry of Education. (2013). *Private schools policy and procedure manual*. Retrieved from [http://www.edu.gov.on.ca/eng/general/elemsec/privsch/PrivateSchools\\_PolicyManual.pdf](http://www.edu.gov.on.ca/eng/general/elemsec/privsch/PrivateSchools_PolicyManual.pdf)
- Ontario Ministry of Education (2019, September 17). Ontario takes action to improve access to education for first nation students. Retrieved from <https://news.ontario.ca/>
- Mintu-Wimsatt, A., Kernek, C., & Lozada, H. R. (2010). Netiquette: Make it part of your syllabus. *Journal of Online Learning and Teaching*, 6(1), 264. Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/1497197786?accountid=15115>
- Moen, R., & Norman, C. (2006). Evolution of the PDSA cycle. Retrieved from [http://deming.ces.clemson.edu/pub/den/deming\\_pdsa.htm](http://deming.ces.clemson.edu/pub/den/deming_pdsa.htm)
- Morgan, G. (2006). *Images of organizations*. Thousand Oaks, CA: Sage.
- Muller, K. V. (2007). [Title removed to anonymize Academy X] *American Indian Quarterly*, 31(1), 129-164,214. Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/216859263?accountid=15115>
- Munroe, E.A, Borden, L., Orr, A.M, Toney, D. & Meader, J. (2013). Decolonizing Aboriginal education in the 21st century. *McGill Journal of Education*, 48(2), 317-337.
- Nadler, D. A., & Tushman, M. (1989, August). Organizational frame bending. Principles for managing reorientation. *Academy of Management Executive*, 3(3), 196.
- Nadler, D. A., & Tushman, M. (1999). The organization of the future: Strategic imperatives and core competencies for the 21st century. *Organizational Dynamics*, 27(1), 45-60.

- Ndlovu, M. C., & Mostert, I. (2018). Teacher perceptions of moodle and throughput in a blended learning programme for in-service secondary school mathematics teachers. *Africa Education Review*, 15(2), 131-151.  
doi:<http://dx.doi.org.proxy1.lib.uwo.ca/10.1080/18146627.2016.1241667>
- Nelson, S., Y. Brunetto, R. Farr-Wharton & S. Ramsay (2007). Organizational effectiveness of Australian fast growing small to medium sized enterprises. *Management Decisions*, 45, (7), 1143-1162.
- Nohria, N., & Khurana, R. (1993). Executing Change: Three Generic Strategies,” *Harvard Business School*.
- Northouse, P. (2016). *Leadership: Theory and practice* (7th ed.). Thousand Oaks, CA: Sage.
- Ontario Ministry of Education. (2018). *Memorandum to: Directors of education*. Retrieved from: <http://www.edu.gov.on.ca/eng/policyfunding/memos/march2018/virtual-learning-environment.html>
- O'Neill, J. (2000). SMART goals, SMART schools. *Educational Leadership*, 57(5), 46-50.  
Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/224843577?accountid=15115>
- Palmer, B. (2004). Overcoming Resistance to Change. *Quality Progress*. 37, (4), 35.
- Park, S. Y., Kim, S., Cha, S., & Nam, M. (2014). Comparing learning outcomes of video-based e-learning with face-to-face lectures of agricultural engineering courses in korean agricultural high schools. *Interactive Learning Environments*, 22(4), 418-428.  
doi:<http://dx.doi.org.proxy1.lib.uwo.ca/10.1080/10494820.2012.680967>
- Parr, J. M., & Fung, I (2006). A review of the literature on computer-assisted learning,

- particularly Integrated Learning Systems, and outcomes with respect to literacy and numeracy. Retrieved from <http://www.minedu.govt.nz/index.cfm?layout=documentation&documentationid=5499&indexid=6920&indexparentid=1024>
- Phillips, P. P. (2012). *The bottomline on ROI* (2nd ed.). United States: HRDQ
- Picciano, A. G., Seaman, J., & Allen, I. (2010). Educational transformation through online learning: To be or not to be. *Journal of Asynchronous Learning Networks*, 14(4), 17-35. Retrieved from [http://sloanconsortium.org/publications/jaln\\_main](http://sloanconsortium.org/publications/jaln_main)
- Pijanowski, L. (2010). Teachers click with shared content and anytime access. *Journal of Staff Development*, 31(1), 30-33. Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/61802701?accountid=15115>
- Pollock, K. (2013). Problems of practice for an organizational improvement plan. Retrieved from <https://www.edu.uwo.ca/graduate-education/documents/professional/Problem-of-Practice-Guide.pdf>
- Pappas, C. (2015, May 26). The top LMS statistics and facts for 2015 you need to know. *Elearning Market*. Retrieved from <https://elearningindustry.com/top-lms-statistics-and-facts-for-2015>
- Price, J. (2007). Democracy: A critical red ideal. *Journal of Thought*, 42(1/2), 9-25. Retrieved January 16, 2020, from [www.jstor.org/stable/42589907](http://www.jstor.org/stable/42589907)
- Ragoonaden, K., & Mueller, L. (2017). Culturally responsive pedagogy: Indigenizing curriculum. *The Canadian Journal of Higher Education*, 47(2), 22-46. Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi->



bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/1947019629  
?accountid=15115

Reigeluth, C. M., Watson, W. R., Watson, S. L., Dutta, P., Chen, Z., & Powell, N. D. (2008).

Roles for technology in the information-age paradigm of education: Learning management systems. *Educational Technology*, 48(6), 32-42. Retrieved from <http://thejournal.com>

Revere, L., & Kovach, J. V. (2011). Online technologies for engaged learning: A meaningful

synthesis for educators. *Quarterly Review of Distance Education*, 12(2), 113-124,149-150. Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi->

[bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/920291723?accountid=15115](https://www-lib-uwo-ca.proxy1.lib.uwo.ca/docview/920291723?accountid=15115)

Rocco, T. & Plakhotnik, M. (2009). Literature reviews, conceptual frameworks, and theoretical

frameworks: Terms, functions, and distinctions. *Human Resource Development Review*, (8), 120-130. Retrieved from

[https://www.researchgate.net/publication/249673870\\_Literature\\_Reviews\\_Conceptual\\_Frameworks\\_and\\_Theoretical\\_Frameworks\\_Terms\\_Functions\\_and\\_Distinctions](https://www.researchgate.net/publication/249673870_Literature_Reviews_Conceptual_Frameworks_and_Theoretical_Frameworks_Terms_Functions_and_Distinctions)

Rogers, E. M. (1962). *Diffusion of Innovations*. London, Free Press.

Rogers, E. M. (1995). *Diffusion of Innovations*. (4th ed.). New York: Free Press.

Rogers, E. M. (2003). *Diffusion of Innovations*. (5th ed.). New York: The Free Press.

Rottmann, C. (2007). Leadership and change for social justice: Mapping the conceptual terrain.

*Journal of Educational Administration and Foundations*, 18(1&2), 52-91.

Rushowy, K. (2019, March 25). Mandatory e-learning announced by ford government comes under fire from NDP. *The Star*. Retrieved from <https://www.thestar.com/>

Saettler, P. (2004). *The evolution of American educational technology*. Greenwich, Connecticut:

- Information Age Publishing. *Journal of Educational Administration and Foundations*, 18(1&2), 52-91.
- Samarawickrema, G. & Stacey, E. (2007). Adopting web-based learning and teaching: A case study in higher education. *Distance Education*, 28(3), 313-333.
- Saruhan, N. (2014). The Role of corporate communication and perception of justice during organizational change process. *Business and Economics Research Journal*, 5(4), 143–166. Retrieved from <http://search.proquest.com/docview/1629935647/>
- School Board X. (2017-2018). School board X education services agreement for [Indigenous] students. Retrieved from [URL removed to anonymize School Board X]
- Seferoglu, S., Yildiz, H., & Yücel, Ü. A. (2014). Teachers' burnout: Indicators of burnout and investigation of the indicators in terms of different variables. *Egitim Ve Bilim*, 39(174) Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/1554961799?accountid=15115>
- Sinek, S. (2009). *Start with why: How great leaders inspire everyone to take action*. New York, United States: Penguin Group.
- Singh, V., & Thurman, A. (2019). How many ways can we define online learning? A systematic literature review of definitions of online learning (1988-2018). *The American Journal of Distance Education*, 33(4), 289-306.  
doi:<http://dx.doi.org.proxy1.lib.uwo.ca/10.1080/08923647.2019.1663082>
- Statistics Canada. (2011). *Aboriginal peoples: Act sheet for Canada*. Retrieved from <https://www150.statcan.gc.ca/n1/pub/89-656-x/89-656-x2015001-eng.htm#a7>
- Stockless, A. (2018). Acceptance of learning management system: The case of secondary school teachers. *Education and Information Technologies*, 23(3), 1101-1121.  
doi:<http://dx.doi.org.proxy1.lib.uwo.ca/10.1007/s10639-017-9654-6>
- Stogdill, R. M. (1974). *Handbook of leadership: A survey of theory and research*. New York:

Free Press.

Straub, E. T. (2009). Understanding technology adoption: Theory and future directions for informal learning. *Review of Educational Research*, 79(2), 625-649. Rogers, E. M. (1962).

The Ethical Standards for the Teaching Profession. (2018). Retrieved from

[https://www.oct.ca/-/media/PDF/Standards%20Poster/standards\\_flyer\\_e.pdf](https://www.oct.ca/-/media/PDF/Standards%20Poster/standards_flyer_e.pdf)

Tichnor-wagner, A., Wachen, J., Cannata, M., & Cohen-vogel, L. (2017). Continuous improvement in the public school context: Understanding how educators respond to plan–do–study–act cycles. *Journal of Educational Change*, 18(4), 465-494.

doi:<http://dx.doi.org.proxy1.lib.uwo.ca/10.1007/s10833-017-9301-4>

Toffler, A. (1990). *The Third Wave*. Bantam Books.

Truth and Reconciliation Commission of Canada. (2015). *Canada's residential schools: Missing children and unmarked burials* (Vol. 4). Montreal: McGill-Queen's University Press.

Tsoukas, H. & Chia, R. (2002). On organizational becoming: Rethinking organizational change. *Organization science*, 13(5), 567-582.

Ullmann, J. (2009). Alternative uses for course management systems: They aren't just for classes anymore. *Online Journal of Distance Learning Administration*, 12(3), 3-17. Retrieved from <http://www.westga.edu/~distance/ojdla/>

U.S. Department of Education, Office of Educational Technology (2017). *Reimagining the Role of Technology in Education, National Education Technology Plan Update*, Washington, D.C.

Vogel, R. (2012). Leading with hearts and minds: Ethical orientations of educational leadership doctoral students. *Values and Ethics in Educational Administration*, 10(1), 1-12.

Walker, D. S., Lindner, J. R., Murphrey, T. P., & Dooley, K. (2016). Learning management

- system usage: Perspectives from university instructors. *Quarterly Review of Distance Education*, 17(2), 41-50,61-63.
- Wang, J., Doll, W. J., Deng, X., Park, K., & Yang, M. (2012). The impact of faculty perceived reconfigurability of learning management systems on effective teaching practices. *Computers and Education*. doi: 10.1016/j.compedu.2012.09.005
- Wassenberg, A. (2019, July 31). Take it from an Ontario teacher: e-learning sets Ontario kids up to fail. *Huffpost*. Retrieved from <https://www.huffingtonpost.ca/>
- Watson, W. R., & Watson, S. L. (2007). An argument for clarity: What are learning management systems, what are they not, and what should they become? *TechTrends*, 51(2), 28-34. Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/223124171?accountid=15115>
- Western, 2017 (November). The doctor of education (EdD) organizational improvement plan (OIP): Culminating research-informed document. Version 9.
- Wichadee, S. (2015). Factors related to faculty members' attitude and adoption of a learning management system. *TOJET : The Turkish Online Journal of Educational Technology*, 14(4)
- Yapici, I. U., & Akbayin, H. (2012). High school students' views on blended learning. *Turkish Online Journal of Distance Education*, 13(4), 125-139. Retrieved from <https://www-lib-uwo-ca.proxy1.lib.uwo.ca/cgi-bin/ezpauthn.cgi?url=http://search.proquest.com.proxy1.lib.uwo.ca/docview/1361841943?accountid=15115>

Appendix

Table A2

*Summarized Goals of the Planned Change*

OIP Goal	Increase LMS Adoption			
	Current State	Envisioned State		
Goals of the Planned Change	Present	Year 1	Year 2	Year 3
Increase LMS Access	Inconsistent access. Some teachers have used a LMS in their courses some not at all.	Teachers and Students Login Daily   Parents Bi-Weekly	Teachers and Students Login Daily   Parents Bi-Weekly	Teachers and Students Login Daily   Parents Bi-Weekly
Increase Tool Engagement	Inconsistent usage. Usage based upon teachers' preferences.	Content, Grades, Activity Feed & Announcements, Portfolio	Discussions, Assignments, Quizzes, Rubrics	Additional Tools, Mentorship Role
Increase LMS Satisfaction	No training or support has been provided.	Deliver training and provide support. Capture feedback and establish training and support benchmarks	TBD	TBD
Indigenize the Curriculum	Inconsistent use of Indigenous resources. Some staff members have incorporated some Indigenous content some not at all.	Publish 3 resources a week, retrieve 5 resources a unit	TBD	TBD
Increase Credit Accumulation	7.3 credits earned per student.	7 credits / student per year	TBD	TBD

Table A3

*Identifying and Addressing Potentially Negative Stakeholder Reactions*

PoP/Goal: Increase LMS Adoption at Academy X				
Person or Stakeholder Group	Position	Role in Change	Negative Reactions	Addressing Stakeholder Reactions
Senior Leadership	IT Manager	Formal approval of LMS annual contract.	This LMS is taking financial resources away from the school.	Seek additional funding opportunities, showcase how the LMS can be leveraged to bring in revenue.
	Steering Committee (e.g. Director of Education, Director of Finance, Director of Operations)	Analyze, discuss, and make future recommendations/decisions about change initiative	Is the LMS living up to its potential? Will an LMS have a big impact in a secondary school setting?	Keep informed about the ongoing change. Publicise successful uses. Align to mission and vision of the organization.
Administrators	Principal	Reinforce goals and objectives of LMS adoption	A lot of time during PD and staff meetings is being allocated to this transition.	Showcase how the change is an investment that will pay dividends in the future.
	Vice Principal			
Change Leader	Development Officer	Administrator of the LMS and	Staff members are	Staff members are resistance for a reason. Understand the psychology of

		overall lead the change initiative.	not doing their part.	change and carefully pay attention to resistance to identify important next steps.
Academy X Staff	Teachers	Utilize instructor tools in the LMS (e.g. Content, Grades, and Learning Activities etc.).	This is going to be a lot more work. I already don't have enough time.	Showcase how will make your job easier over time.
	EAs			
	Additional Support Staff (CYW etc.)	Provide support for students (e.g. submit outstanding assignments collect evidence of learning etc.).	Is this the best solution available? I wasn't given the opportunity to provide input about this LMS.	Where possible, involve staff members in the decision-making process.  Strategically showcase tools that are easy to use and provide ongoing training and support (e.g. create a holding tank).
			Technology is too confusing and hard to learn.	Demonstrate to staff how they can still make their blended courses their own.
			This will infringe on my autonomy and how I do my job.	Showcase research that demonstrates how the platform will enhance teaching and learning.
			I have heard of LMSs before what is different	Differentiate this platform from competitor

			about this change?	platforms (e.g. awards etc.)
Students	Grade 9,10,11,12 and college students.	Engage with the learning activities provided by their teachers.	Why are we using an LMS?	Showcase how the rest of the province and colleges/universities are using the LMS.
			I am overwhelmed with how to use these new tools.	Provide training and ongoing support to students.
Parents/ Guardians	Immediate Family (e.g. parents/guardians).	Audit their child's progress (e.g. grades, announcements, due dates etc.)	Why are we using an LMS?	Showcase the research that supports parent/guardian involvement.
			I am overwhelmed with how to use these new tools.	Provide information nights, reminders, and ongoing support to parents/guardians

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Table A6

*Measuring Goals of the Planned Change*

Goal Category	Teachers	Students	Parents	Measure	Frequency
Increase LMS Access	Login daily (200 logins annually)	Login daily (200 logins annually)	Login bi-weekly (20 logins annually)	Login History (Data Hub report)	Monthly
Increase Tool Engagement	Content, Grades, Activity Feed & Announcements, Portfolio	TBD	N/A	Tool Usage (Data Hub report)	Monthly
Increase LMS Satisfaction	TBD	TBD	TBD	Survey	Per Semester
Increase Credit Accumulation	N/A	6.8 credits / student for semester 1 and 7.2 credits / student for semester 2	N/A	Final Grades (Data Hub report)	Per Semester
Indigenous Resources Published	Publish 120 Indigenous resources (Cultural Coordinator)	N/A	N/A	Number of Resources Published	Per Semester
Indigenous Resources Retrieved	Retrieve 15 Indigenous resources	N/A	N/A	Number of Resources Retrieved	Annually

Table A7

*Stakeholders' Responsibility Charting*

Stakeholder Group	Responsibilities
Administrators	- Allocate time for initial training, ongoing professional development, and ongoing support.
Change Leader	- Provide opportunities to celebrate small wins.
	- Deliver initial & ongoing training

Teachers	<ul style="list-style-type: none"> <li>- Provide ongoing support (e.g. emails, in-person one-on-ones).</li> <li>- LMS administration responsibilities (e.g. course creation, user enrollments)</li> <li>- Instructional Design</li> <li>- Create learning resources</li> <li>- Leverage instructor tools in their classrooms to satisfy Ministry Inspection Requirements (e.g. Content, Grades, Announcements, Activity Feed, Due Dates).</li> </ul>
Support Staff	<ul style="list-style-type: none"> <li>- Using data and the grade tool, support students identifies as at-risk by completing and submitting outstanding assignments.</li> </ul>
Students	<ul style="list-style-type: none"> <li>- Collect evidence of student work in portfolio.</li> <li>- Engage with the learning activities provided.</li> </ul>
Parents/Guardians	<ul style="list-style-type: none"> <li>- Login to Brightspace for Parents to audit child’s progress.</li> </ul>

Table A8

*Semester Start To-Do List*

Setup Category	Action	Next Step
Course Shell Verification	Verify all course shells have been created from your timetable.	If you are missing a course shell, please contact LMS Administrator.
	Confirm course name and code	If your course name and/or code is incorrect, please contact LMS Administrator. Pin courses
Course Setup	Copy, create, or import course components from your previous courses or previously delivered courses from former teachers.	Copy all or select components from any previous class that you have previously delivered (e.g. Content, Grades, Assignments, Quizzes, Discussions etc.). If no resources are available, you can also copy from “MASTER Content & Grades Template.”
	Update all course dates (due dates, date restrictions, etc.).	Verify start dates, due dates, end dates, release conditions, calendar dates, etc. Note: This can also be done in bulk by offsetting dates in the Manage Dates tool.
	Update Course Banner.	Change the Banner of your course to reflect your preferences

<p>Add welcome messages to your course homepage.</p>	<p>Announcements are only visible to your students. Post a picture or record a video note to create a welcome message for your students.</p>
<p>Update syllabus with all current course information and then upload to the Content tool.</p>	<p>Activity Feed is visible to parents/guardians in Brightspace for Parents. Post a message to introduce yourself to parents/guardians.</p> <p>Locate your syllabus from Academy X’s Google Drive. In the Content tool of your course, create a new unit called “Course Overview” and then upload your syllabus.</p>
<p>Add in curriculum expectations for your course.</p>	<p>In the Content tool, please add in the curriculum expectations of your course. These expectations will be later mapped to your lesson plans.</p>
<p>Widgets, Navbars, and Homepages.</p>	<p>If any curriculum standards are missing, please contact LMS Administrator</p> <p>Review your course widgets, navbars, and homepages. If you want to customize any of these areas, please contact LMS Administrator.</p>
<p>Optional: Include an introduction discussion.</p>	<p>Introduce yourself and provide students with an opportunity for them to introduce themselves as well (e.g. two truths and a lie etc.).</p>

Table A9

*Incremental Ongoing Instructor Tool To-Do List*

Instructor Tool	Expectations	Year 1	Year 2	Year 3
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Content	Create the following structure throughout the content tool: Unit > Lesson (Success Criteria) > Lesson Template (Not Visible) > Resources.  Align expectations to the lesson template.	✓	✓	✓
Grades	Capture all forms of evaluation. Create grade categories, items, and link grade items to instructor tools where appropriate (discussions, assignments, quizzes).	✓	✓	✓
Announcements & Activity Feed	Try to create regular announcements/activity feed posts for students once a week or at least once a unit (e.g. introductions, reminders, updates, changes etc).	✓	✓	✓
Portfolio	All pictures, videos, and reflections collected with the “Portfolio” app will be visible.	✓	✓	✓
Discussions	Where appropriate, use the discussions tool as diagnostic, formative or summative assessments throughout your units (reflection, consolidation, collaboration etc.).	✗	✓	✓
Assignment	Where appropriate, use the assignments tool as diagnostic, formative or summative assessments throughout your units to collect evidence of student learning (projects, papers etc.)	✗	✓	✓
Quizzes	Where appropriate, use the quiz tool as diagnostic, formative or summative assessments throughout your units (e.g. knowledge checkpoint, tests etc.).	✗	✓	✓
Rubrics	Where appropriate, create and attach rubrics to assignments, quizzes, discussions, or grade items. I recommend you copy the rubric “Sample Rubric” shared to you and adjust.	✗	✓	✓
Additional Tools	Within “Course Admin” continue to utilize additional tools within your course (e.g. intelligent agents).	✗	✗	✓
Mentorship	When possible, try to provide support to your fellow staff members.	✗	✗	✓