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A Blueprint for Promoting Innovation, Interdisciplinary Teamwork, and Collaboration

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Abstract

In response to the myriad of pressures we are experiencing across the higher education landscape, many colleges and universities are exploring different ways to manage and drive change within their institutions. Centres for Teaching and Learning (CTLs) are well-positioned to be high-impact drivers of change in this evolving educational arena. With this comes the expectation that they will emulate and promote innovative practices and creative approaches when addressing many of our most complex academic challenges. Increased agility, cooperation, and strategic foresight within these centres are necessary to detect, respond, and adapt to anticipated future changes and disruptions. However, coordinating such a broad array of resources among CTL departments coupled with interpersonal implications often associated with organizational change and transformation can pose ongoing challenges for leadership. This Organizational Improvement Plan (OIP) will address these issues within the context of a teaching and learning centre at a mid-sized college in Southern Alberta. It will focus specifically on the fluctuating demands and functionality of the centre and the need for increased agility, cooperation, and collaboration among CTL departments to respond more effectively to our continuously shifting circumstances. This is accomplished by exploring the relational and systemic nature of the problem through the lens of complexity leadership theory and its three entangled leadership models: *adaptive leadership*, *enabling leadership*, and *administrative leadership*. The outcome is a strategy theoretically grounded in social cognition theory and a leadership model for cultivating adaptive capacity and leadership competence in strategic foresight.

Keywords: Complexity leadership theory, adaptive space, organizational learning, scenario planning, strategic foresight, design thinking, ambidexterity theory, organizational architecture, network structures, organizational congruence

Executive Summary

The higher education ethos faces the perfect storm of social, political, and economic instability, provoked by the drastic action many institutions are required to take in response to new government funding models, public scrutiny over the virtue of higher education credentials (Educause, 2020), and most recently, our national and provincial response to the COVID 19 pandemic. Because higher education institutions are both products and contributors to society, the economy, and the communities that make up our Canadian landscape, this comes with the prospect that they will bestow something of value to the world around them (Educause, 2020).

As these societal trends and issues continue to shift and add tension to our campuses' functional and cultural aspects, polarizing perspectives about what the future of higher education holds, whom it should serve, and what it should be (Setser & Morris, 2015) are becoming more prominent in the polarizing debate around the future sustainability of academia. While providing a quality student learning experience is most often the precursor of institutional priorities, much of the discourse around the future sustainability of our institutions is centred on financial constraints and equipping learners with a viable path from college to the workforce (Setser & Morris, 2015).

Changes in how people interact, engage with, and enjoy the world around them have also impacted learner expectations and teaching practices (Organization for Economic Co-Operation and Development (OECD), 2017). Already we are seeing pressures for alternative types of teaching and learning models such as accelerated and customizable learner pathways, competency-based education, and creative ways to integrate new and emerging technologies into the learning environment. These trends have also become common threads in our strategic institutional discourse. At the same time, societies' response to human rights, mental health, and globalization has escalated the need for institutions to respond more meaningfully to matters concerning equity, diversity, and inclusion (EDI), indigenization, and health and wellness.

At many colleges and universities, Centres for Teaching and Learning (CTLs) play an imperative role in building, maintaining, and promoting the systems, structures and models associated with evolving teaching and learning practices (Forgie et al., 2018; Lieberman, 2018). Part of this function includes building a robust infrastructure to support access, quality assurance measures, innovative teaching models, and the integration of strategic priorities into academic program development and delivery. Although the organizational structure of CTLs varies from one institution to another, a pivotal function common to most is how they contribute to student retention efforts either directly or indirectly through student academic support and faculty development.

This Organizational Improvement Plan (OIP) focuses specifically on one mid-sized college's Centre for Teaching and Learning in Southern Alberta. While our centre's bird's eye view portrays an established teaching, learning, and innovating ecosystem, a closer look reveals that some facets of our organization are better prepared than others to take on and execute innovation work (Setser & Morris, 2015). For instance, some organizational units have become accustomed to working and even thriving under uncertain circumstances. In contrast, others lack the organizational capacity to adapt or make sense of our changing landscape. As this OIP will reveal, these matters have created a polarizing climate that, in effect, has led to mistrust among some teams and challenges for leadership regarding the coordination of resources and their ability to detect, respond, and adapt to anticipated future change (IFTF, 2020). It also brings attention to a lack of synergy among various departments, limiting their ability to address complex institutional challenges collectively and effectively. Therefore, the problem addressed in this OIP is how to foster a conducive centre-wide atmosphere that enables innovation, teamwork, and collaboration. It will specifically address the underpinning relational factors affecting trust and transparency among CTL departments to enhance participation, innovation, and creative problem-solving.

The development and implementation of this OIP will be accomplished through the lens of complexity leadership theory and its three associated leadership roles: adaptive (entrepreneurial) leadership, enabling leadership, and administrative (operational) leadership. The first chapter frames the problem by introducing the organizational context and vision for change. Chapter 2 expands on the foundational narrative introduced in the first chapter, diving deeper into the various layers of complexity leadership while exploring the notion of creating "adaptive space" to enact system-level change within the CTL. In doing so, it outlines a change leadership framework that draws from the seminal and influential organizational change processes of Lewin (1997) and Nadler and Tushman (1978) while incorporating the more contemporary contribution of Setser and Morris' (2015) *Building a Culture of Innovation in Higher Education* Framework.

Chapter 2 also defines the relational factors and system-level conditions necessary for creating adaptive capacity and strategic foresight across the entire centre. This is accomplished by proposing a scaffolded three-phased solution to the problem. The solution begins with analyzing and reorientating our centre's adaptive systems and structures. Then, developing adaptive leadership capacity among mid-level leadership in phase two becomes the impetus for the third phase, which involves interdisciplinary teams from all levels of CTL working interdependently on large-scale initiatives, innovation work, and intensive problem-solving scenarios. This solution becomes the premise for a successful implementation strategy centred on the practice of strategic foresight and systems thinking across all CTL activities. As a more tangible device for monitoring the change progression, I use an "S-curve" analogy, rooted in Handy's (1995) sigmoid curve model, to highlight the patterns of organizational change and evolution. Other discernible aspects of Chapter 3 are Markiewicz and Patrick's (2016) framework for monitoring and evaluation and a communication strategy that incorporates Deszca et al.'s (2020) four-phased communication approach and Clarke's (2014) Complexity Leadership Development framework.

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Chapter 1: Introduction and Problem

Some argue that an environment undergoing the rapid and far-reaching changes we are currently experiencing in higher education requires conditions for creativity, experimentation, and agile decision-making (Setser & Morris, 2015; Tierney & Lanford, 2016). However, an existing organizational culture can exert a powerful influence that is either beneficial or detrimental to the change that needs to occur. At many institutions, Centres for Teaching and Learning (CTLs) are instrumental in supporting and maintaining the systems and processes associated with evolving teaching and learning practices (Forgie et al., 2018). Yet, a lack of collaboration and successful coordination of resources within these centres can pose an ongoing challenge for CTL leadership as they attempt to create a climate that effectively supports and advocates for the academic transformation required to meet our most pressing challenges.

This Organizational Improvement Plan (OIP) will address this issue within the context of a teaching and learning centre at a mid-sized college in Southern Alberta, Canada. For anonymity, the institution will be referred to as Snow Island College. The OIP is structured into three major chapters. It will focus on the fluctuating demands and functionality of the centre and the need for increased agility, cooperation, and collaboration among CTL departments to effectively champion and support the institution's strategic direction. This is achieved by exploring the relational and systemic nature of the problem through the lens of Complexity Leadership Theory and its three associated leadership roles: adaptive leadership (entrepreneurial), enabling leadership, and administrative leadership (operational) (Uhl-Bien et al., 2007). The outcome is an implementation strategy theoretically grounded in social cognition theory and a model where the role of leadership is to build, nurture, and enable an adaptive climate that promotes and fosters adaptive functions and strategic foresight across all levels of the organization. This chapter provides the organizational context, influential drivers, and other factors that have shaped the problem of practice (PoP) and vision for change.

Organizational Context

Located on the traditional lands of the Siksikaitsitapi (Blackfoot), Snow Island College is one of twenty-six publicly funded post-secondary institutions in Alberta. Together, these make up the Alberta Adult Learning System and offer a multitude of educational opportunities to people provincially, nationally, and abroad. As contributors to the province's economic and community growth and sustainability, these institutions provide skill development, research, and innovation, while preparing graduates for gratifying careers and lifelong learning (Snow Island College, 2019). According to the Ministries of Alberta website, the Alberta learning system vision is focused on equal opportunity and is guided by the five principles of accessibility, affordability, quality, accountability, and coordination (Alberta Advanced Education, 2021).

Snow Island College's current Comprehensive Institutional Plan (CIP) was prepared under the direction of the board of governors in accordance with associated ministerial guidelines and principles. It provides strategic direction on four key focus areas: Academic Transformation, Collaborative Partnerships, Resource Innovation, and People Development. This strategy was built on the existing foundation of previous plans and through consultation of both internal and external stakeholders. It claims to be rooted in the notion of growing towards a more sustainable future through increased student enrolment and a commitment to health and wellness, program development, community relations, and employee engagement. All initiatives outlined in the CIP aim to deliver the highest quality, accessible education while enhancing the student experience and overall institutional culture (Snow Island College, 2019).

Political and Economic Contexts

Established in 1957, Snow Island College is governed by a board of governors and operates as a comprehensive community college under the authority of the Post-Secondary Learning Act of Alberta (PSLA). The institution includes one main campus and plays a stewardship role for adult learning within

its surrounding geographic service region. As a member of Campus Alberta, the college works collaboratively with other post-secondary institutions, school districts, local industry, and community organizations by providing access to programs and services throughout the region. The college offers a variety of programs in Business Management, Design and Technology, Human and Justice Services, Health and Wellness, Agriculture and Environmental Studies, and Trades. These programs include foundational learning, upgrading, dual-credit, university transfer, certificates, diplomas, apprenticeship programs and Campus Alberta Quality Council (CAQC) approved baccalaureate degrees.

In 2019, under a newly formed provincial United Conservative Government, an independent panel of experts was commissioned to review Alberta's finances and the economy. The resulting *Blue Ribbon Panel Report* presented a six-month review and recommendations that focused on ways to curb provincial government spending. One of the implications to post-secondary education was introducing a performance-based funding model linking government funding support to achieving specific labour market goals (Strikwerda, 2020). This came with the expectation for institutions across the province to focus efforts on serving the needs of the labour market, measuring success in terms of graduate outcomes, and commercializing research in the interest of industry and businesses.

Consequently, student employability measures have become central to the strategic dialogue concerning the future state of Snow Island College and other institutions across the province (Alberta Government, 2021). As a catalyst for economic, social, and personal development for the surrounding community and the region, applied research and scholarly activities are strategically aligned with industry, business, government, and community needs. This is emphasized in the institution's integrated applied research strategy that focuses on providing students and faculty with opportunities to address current real-world problems through innovative solutions that benefit our industry and business partners (Snow Island College, 2020).

Social and Cultural Contexts

Snow Island College's CIP also builds on a solid foundation of teaching and learning, a base measured in the success and satisfaction of its students and graduates. It represents our core values of people, excellence, and success and the principles of quality, collaboration, sustainability, accessibility, and diversity (Snow Island College, 2020). In addition, a strong focus has been placed on people engagement and health and wellness. This includes employee development and establishing a safe environment to grow, collaborate, explore, and inspire. The CIP also recognizes flexible, accessible learning opportunities as essential to meeting the needs of its evolving learning community.

Most recently, the college's dedication to supporting and fostering equity, diversity, and inclusion has been bolstered by a federal grant to help overcome systemic barriers that hinder career advancement, recruitment, and retention of underrepresented and disadvantaged groups. Furthermore, the college has shown its commitment to honour, respect and deepen our understanding of traditional cultures and ways of knowing through the implementation of the Niitsitapi Strategy (2021). This strategy is meant to help guide us in our work and take collective responsibility in implementing the Truth and Reconciliation Commission (Snow Island College, 2021). The college prioritizes Indigenous education and has established Indigenous-centred holistic support services while building stronger relationships with our Indigenous communities (Snow Island College, 2021).

The Centre for Teaching and Learning at Snow Island College Context

At many institutions, Centres for Teaching and Learning (CTLs) are instrumental in supporting and promoting the systems and models of evolving pedagogical practices (Forgie et al., 2018) and initiatives that enhance the student learning experience. As the Dean for the CTL at Snow Island College, my academic portfolio comprises ten departments. Across these units, we have close to fifty employees, each positioned on a spectrum of full-time continuing positions to casual project-based positions. There is also an expansive range of union and excluded roles and those with formal administrative titles, such as manager, coordinator, or team lead. The most senior-level leadership in our centre aligns with those

in the five academic centres, the Registrar's office, and Student Affairs. It includes a dean (myself) and an associate dean.

Influenced by institutional strategies, student outcomes, and high-impact practices that promote quality teaching and learner success, we are often driven by rapid changes in technology and recognized for promoting innovative learning models. Recently, CTLs have been deemed 'the first responders' in addressing some of the most critical transformations in higher education (Bates, 2020; Eaton, 2020; Naffi et al., 2020). This was most apparent following March 11, 2020, when the World Health Organization (WHO) declared COVID 19 a pandemic, driving colleges and universities across the world to immediately veer from in-person teaching to remote delivery (Eaton, 2020). Institutions that were well equipped with teams of educational developers, instructional designers, digital media specialists, and others whose roles focus on supporting teaching and learning experiences showed their value to their institutions by ensuring both students and faculty had what they needed for the institutions to stay open (Eaton, 2020). As faculty and students scrambled to digitize content and navigate a host of new tools, technologies and learning environments, CTL teams were marshalled in new and inspired ways to meet the needs of their learning communities (Educause, 2021; Quillen & Siemens, 2020). The CTL at Snow Island College was not an anomaly to this phenomenon.

Our CTL at Snow Island College aspires to continuously enhance the systems and models associated with institutional initiatives that contribute to learner success and those that will enhance institutional sustainability. To accomplish this, the centre embodies wide-ranging skill sets in academic research, learning design, curriculum development, emerging technologies, accessible learning support, assessment design, media production, and faculty development. Each team within the centre adheres to distinct processes and maintains systems that have, for many years, contributed independently to the teaching and learning ecosystem that exists at the institution today. Each unit also possesses a range of comfort levels for trying new approaches within their immediate scope of influence and expertise.

Historically, our primary mandate has been to support academic programs. However, we have increased our support to a broad range of industry and community-driven initiatives, non-credit learning experiences, and applied research projects in recent years. This aligns with our centre's vision to "drive a new era of course design, program development and learning support that fosters innovative teaching practices, high-quality learning experiences, and environments that unleash every learner's potential" (Centre for Teaching and Learning, 2020). This vision was established as part of our centre's strategic plan and through consultation with our staff and the students, faculty, and other stakeholders who benefit from our services and support. Central to this plan is a set of values that guide our work and how we interact with each other and our learning communities. These values include being learner-centred, steeped in teamwork, and applying innovation and creativity.

Organizational and Leadership Frameworks that Drive the Organization

Despite an institutional strategy that boasts innovative and transformative priorities, theoretical underpinnings of bureaucracy drive many of our institutional operations. This fuels the ongoing debate around whether higher education has the aptitude for agile systems, processes, and structures necessary for innovation and transformation (Maimon & Schneider, 2018; Manning, 2018). One argument posits that academia's concrete nature and hierarchical structure inhibit our capacity for quick modifications, experimentation, and novel innovations (Manning, 2018). Setser and Morris' (2015) research also draws attention to the challenges associated with proposing new approaches that have yet to produce evidence of effectiveness. These authors claim that innovation is a cultural change that requires a significant shift in approach and mindset as we leave behind some of the more deeply rooted and familiar ways of doing things for new experiences and opportunities. Others argue that although a complete overhaul to our current system may seem insurmountable, we have the tools we need right now to reimagine new ways to conduct operations and meet the needs of our learning communities (Maimon & Schneider, 2018).

Both perspectives were undeniably challenged in our response to the COVID-19 pandemic. As the higher education ethos attempts to make sense of the aftermath of such an immense disruption, it is not difficult to imagine the imminent effects on many of the time-honoured systems and structures that have been used to organize people, facilitate learning, adhere to quality standards, report to government and accrediting bodies, and legislate policies. In truth, these types of bureaucratic mechanisms have always been very much a part of our institution's organizational infrastructure and will surely endure into the future. As Manning (2018) notes, institutional hierarchical structures, operating procedures, and decision-making processes have created conditions favourable to unwavering environments over volatile and constantly changing ones. They claim that bureaucracy is an undeniable and enduring perspective inherent to the organizational functions in higher education.

However, some parts of our institution, including departments within the CTL, have started to create space for more flexible models and conditions to support creativity, innovation, and adaptability. This, according to Tierney and Lanford (2016) and Setser and Morris (2015), is necessary considering the world around us is anything but stable and unchanging. As noted in the previous section, these qualities are ubiquitous to our institutional and centre's strategic plans. Nevertheless, defensive norms, such as mistrust, risk avoidance, and rivalry (Bolman & Deal, 2017) across specific departments can pose an ongoing challenge for leadership. These can hinder efforts to cultivate a climate that effectively implements, advocates, and promotes change processes that can adapt and respond to the various pressures we are experiencing.

Leadership Position and Lens Statement

Reporting to the Academic Provost, my role as the dean for the Centre for Teaching and Learning encompasses broad administrative leadership to ten unique service departments. Each plays a critical part in advancing student-centred learning and quality teaching at Snow Island College. As a senior leader, I sit on the two governing bodies that oversee the institution's operations and the

effective and efficient functioning of the academic portfolio. This includes academic program quality assurance, institutional planning and communication, and policy development. I am also a voting member of the Academic Council, which is accountable for engaging stakeholders in academic matters, developing and evaluating policies that impact academic activities, and providing recommendations to the Board of Governors.

As the dean for the CTL, I am responsible for managing resources and building capacity to support the processes associated with faculty and student learning and development. This includes developing and evaluating academic and non-credit offerings; developing and implementing professional development programming for faculty; creating learning support structures and resources, research tools and materials for students; and managing and maintaining the systems and infrastructure to support all learning models and environments. Within our institution, my role is recognized as a position of authority. However, within our centre, authority is distributed more broadly. This reflects my personal leadership approach that encompasses increased autonomy and shared decision-making at all levels of our centre. This will be defined in more detail in the following sections.

Personal Position

In the ten years leading up to my current position as dean, I have developed a profound interest in the various relational attributes and cultures established across our centre and how they connect with other departments within the institution. This comprises the different ways of thinking, behaving, and working (Setser & Morris, 2015) and how each contribute to the interpersonal and group processes that characterize our organizational structure and culture. As such, I am drawn to Schein and Schein's (2018) notion of leadership, which is less about the steps one must follow to lead but rather the energy shared by a group that is accomplishing something new and better. Although I have only been in this position for three years, my experiences in different roles across the organization have taught me that effective leadership is essential at all levels. Each of us has a part to play in understanding the relationships,

networks of people and the complexities of workplace dynamics that comprise both the functional and cultural aspects of our centre and its various departments. In my own leadership development, this has awarded me a deep appreciation for the multiple factors that influence robust and healthy workplace culture, but primarily for ones that foster trust and humility as necessary conditions for creativity and innovation. This seems particularly relevant when today's world places such high demands on organizational resilience, adaptability, and agility (Deszca et al., 2020).

According to Uhl-Bien and Arena (2018), one of the biggest challenges facing leaders today is the ability to position and enable organizations and their people for adaptability. Schein and Schein (2018) relate, claiming that most problems result from faulty interactions between the various social microsystems within complex organizations. In other words, they don't necessarily reside in the individuals but rather in their interactions and relationships with each other. As such, my world view on leadership is grounded in an adaptive leadership approach that acknowledges how systemic change can empower groups to build and sustain adaptive capacity. As Schein and Schein (2018) note, this includes recognizing leadership as categorically humbling and utterly reliant on interdependency. This perspective is also bolstered by my interest in innovative and engaged methods that require stretching beyond conventional solutions to accomplish more engaging experiences, successful initiatives, and new opportunities. Although it is not fixated on one approach, it does encompass aspects of shared and adaptive leadership frameworks. Each has been defined directly or indirectly as roles of *complexity leadership theory*, which focuses on strategies and behaviours that foster learning, adaptation, and creativity (Northouse, 2022). The following sections will further define Complexity leadership theory as the primary theoretical framework that has guided the development of this OIP.

Theoretical Lens

Complexity leadership theory frames leadership as a complex interactive process from which learning, innovation, and adaptability can emerge (Uhl-Bien et al., 2007). Its principal elements include

three distinct yet entangled leadership roles: adaptive leadership (entrepreneurial), enabling leadership, and administrative leadership (operational) (Siemens et al., 2018; Uhl-Bien et al., 2007; Uhl-Bien & Arena, 2017). Each contributes to the dynamic interplay between the formal bureaucratic and administrative functions integral to higher education and the informal, emergent dynamics of complex adaptive systems (CAS) (Bäcklander, 2019; Siemens et al., 2018; Uhl-Bien et al., 2007)

Pertinent to this OIP and its problem of practice is the concept of *entanglement,* which is defined in the CLT literature as the relationship between administrative and adaptive forces of social systems (Uhl-Bien et al., 2007). In other words, entanglement results from these two forces interacting, helping, or contradicting one another. In this sense, because of its impetus to manage the tensions between the organization's bureaucratic and emergent functions, enabling leadership serves as a catalyst for adaptive leadership to thrive (Uhl-Bien et al., 2007). Uhl-Bien and Arena's (2018) recent research on leadership for organizational adaptability further connects enabling leadership to *ambidexterity theory* which includes the concepts of *exploration* and *exploitation*. The former is connected to leadership behaviour that includes providing room for new ideas, allowing for errors, and encouraging learning. The latter is associated with more structured leadership behaviour, such as following plans, adhering to rules, and establishing routines (Schulze & Pinkow, 2020). Ambidexterity theory focuses on balancing the tension of *needing to innovate* and *needing to produce* (Tushman & O'Reilly, 1996; Uhl-Bien & Arena, 2018), both of which are relevant to how our centre operates and provides value to the institution.

Although enabling leadership can occur at all levels of an organization, those often best situated to engage in entanglement are middle managers (Uhl-Bien et al., 2007). The Centre for Teaching and Learning includes managers, team leads, and coordinators who are well-positioned to manage the coordination of top-down dynamics and emergent complex adaptive systems because of their access to resources and vicinity to the centre's production level. Adaptive outputs for this leadership level involve

designing adaptive organizational structures, cultivating networked interactions, providing leadership development (Clarke, 2013; Uhl-Bien & Arena, 2018), and managing conflict (Clarke, 2013). As a senior leader working directly with this group of mid-level leaders, I strive to employ Schein and Schein's (2018) definition of *humble leadership*, which is based on the principles of high openness and high trust. Schein and Schein maintain that keeping pace with accelerated change requires teamwork and collaboration, where trust and openness result from more personalized relationships. I am also inspired by the work of Frei and Morris (2020), who provide a basic formula for trust that includes authenticity, logic, and empathy. Coined the *trust triangle*, they argue that when trust is lost, it can almost always be attributed to a breakdown in one of these three elements.

For me, the desired result of building open and trusting relationships between all levels of leadership is an enabling environment at the production level that fosters knowledge sharing, learning, innovation, and adaptation (Uhl-Bien et al., 2007). As the following section will reveal, the problem of practice of this OIP places significant emphasis on cross-disciplinary collaboration. Therefore, my ability to influence mid-level leadership's approach to managing the formal and informal structural intersections within this realm is essential for connecting departments and their members. These boundary-spanning activities include fostering collaboration and cooperation, leveraging from coalescing processes and skill sets, establishing networks, and sharing resources.

Kezar and Holcombe (2017) maintain that system and complexity leadership models push organizations to consider more than individual skills and accomplishments. In doing so, the emphasis manoeuvres to collaborative strategies and conditions that heighten the potential for interconnections, collective achievements, and a shared vision for the future (Kezar & Holcombe, 2017). The literature on complexity leadership theory highlights structural connections as a critical element in linking members of an organization to the formal and informal processes. These include communication patterns, frequency of communication, and knowledge-sharing mechanisms, also referred to as *network*

conditions (Clarke, 2013). Therefore, complexity leadership involves preserving established connections and cultivating new connections within organizational networks to encourage increased interaction between team members and departments (Clarke; 2013; Siemen et al., 2018; Uhl-Bien et al., 2007). Network conditions will be discussed in more detail in the *Vision for Change* section and Chapter 2 of this OIP.

My Role in the Change Process

As a senior leader, I am guided by theories predicated on the notion that people can adapt and play an important role in the adaptation of others (Frei & Morris, 2020). Therefore, my approach to leadership is to facilitate and leverage opportunities for increased interactions while cultivating conditions that promote and strengthen bottom-up leadership development and social connectivity across all departments of the CTL. To do this, I refer to the concept of *ensembles*, which according to the literature on complex adaptive systems, is used to define the notion of bringing together individuals and working groups with shared interests and complementary qualities (Clarke, 2013). Uhl-Bien et al. (2007) suggest that these groups are more prone to engaging in behaviours that lead to more constructive problem-solving and creativity through purposeful interactions.

Clarke's (2013) research on complexity leadership development, discussed in further detail in later sections of this chapter and subsequent chapters, supports this notion. He maintains that the role of leadership is to facilitate the spontaneous interactions of members and groups and simultaneously create conditions that promote and foster bottom-up behaviours that give rise to learning, innovation, and problem-solving. With trust and transparency as core drivers of human connectivity (Schein & Schein, 2018), vertical or hierarchical leadership in this context is essential to the conditions in which more lateral forms of leadership can thrive (Uhl-Bien et al., 2007). The following section will outline the problem of practice while providing a foundation for this OIP to evolve.

Leadership Problem of Practice

As previously noted, centres for teaching and learning are often regarded as high-impact agents of change within academic institutions. Thus, they play a pivotal role in addressing and overcoming the educational challenges we are experiencing across the higher education landscape (International Observatory on the Social Impacts of AI and Digital Technology, 2020). With this comes the expectation that they will embody and give rise to creative approaches and innovative practices to support institutional strategic initiatives. As Tierney and Lanford (2016) claim, within the field of business, the term "innovation" can easily be defined as the invention of something new to enhance an organization's strategic direction. However, they also dispute that a shared understanding of the conditions necessary to build a culture that promotes and supports innovation in a higher educational context remains somewhat elusive (Black, 2015; Siemens et al., 2018; Setser & Morris, 2015; Tierney & Lanford, 2016). This ambiguity leaves room for customization as the field of innovation in academia evolves. Of particular relevance is how the notion of “innovation” applies to academic program areas versus professional service departments (Black, 2015), such as those in the CTL.

Fuelling our predicament are the complex human behaviours often associated with change (Furr et al., 2018). Responses such as fear, deep-rooted habits, polarization, and lack of trust between departments have perpetuated siloed behaviour and become stumbling blocks in our centre’s ability to collectively detect signals of change, respond to shifting institutional demands, and adapt as necessary. These tensions can exert powerful influences on existing cultures and governance models, leading some to embrace new approaches while others remain impervious to the notion of new ideas or ways of doing things, particularly without assurance or evidence of their effectiveness (Setser & Morris, 2015).

Therefore, the problem of practice this OIP will address is how to foster a conducive, centre-wide atmosphere that enables innovation, teamwork, and cross-disciplinary collaboration. More specifically, how can the underpinning relational factors affecting trust and transparency be improved

among CTL departments to enhance participation, strategic foresight, innovation, and creative problem-solving?

Framing the Problem of Practice

This section of the OIP situates Snow Island College within a broader, more globalized setting. In doing so, it captures some of the bigger-picture developments and trends impacting the world in which higher education teaching and learning practices are taking shape. It will examine how these trajectories have impacted our institution's ability to contribute to and benefit from the social, economic, and political contexts and CTL's integrated role in supporting and preparing for institutional change and a more sustainable future.

External Forces

As political trends continue to drive policy agendas and quality assurance standards, this will undoubtedly impact teaching and learning practices (Educause, 2020). Adding to our circumstances is society's response to mental health, human rights, globalization, and rapid developments in mobile technology. Each has had a profound impact on how people perceive and engage with the world around them. Already we are seeing examples of unconventional learning models such as accelerated learning pathways, dual-credit partnerships, competency-based learning, and industry-focused programming. One current example is the list of recommendations put forward by a provincial task team aimed at supporting Alberta's COVID-19 economic recovery. This roster of presidents, CEOs and other senior-level leaders from colleges and universities across the province has targeted four key areas: workforce data, micro-credentialing, work-integrated learning (WIL), and innovation. In addition to this, a focus on equity, inclusion and access has led many institutions to rethink recruitment and retention strategies to meet the academic and social needs of all students seeking academic credentials. This involves international students, mature learners and those who require learning accommodation or increased flexibility.

Despite plans that enable us to navigate these diverse scenarios, our system is still heavily influenced by its ability to meet government funding provisions. For example, according to our institution's annual report, in 2021-2022, institutions across the province are expected to have an Investment Management Agreement (IMA) with the government. This contract outlines an institutional mandate, an operating and program support grant amount from the government, mutual priorities, and performance metrics to facilitate the allocation of outcomes-based funding. As part of the Post-Secondary Learning Act, the boards of all 26 public post-secondary institutions must prepare, approve, and submit a capital plan and a business plan for each fiscal year to the Minister of Advanced Education (Government of Alberta, 2022). As such, future funds will be distributed in accordance with our ability to meet established targets as outlined in the IMA.

Internal Forces

As colleges and universities further evolve to meet the needs of a more globalized and user-led market, this comes with increased emphasis on providing a more holistic student experience (Black, 2015). In addition to the impact this has on academic teaching and research activity, professional service departments such as ours have had to continuously evaluate our service models, methods, and processes to ensure we are doing our part in contributing to the learning ecosystem and strategic direction of our institution. Part of this work includes seeking signals of change and identifying which potential changes could be the most impactful to student learning (OECD, n.d.). The many roles within this system, all of which serve the ultimate purpose of fostering student success (Educause, 2020), are integral to designing, developing, and maintaining learning experiences for all students. For the CTL, this includes some of the more visible frontline services, such as research assistance, academic tutoring, and advising. However, it also involves a broad range of behind-the-scenes activity, functionality, and continuous knowledge and skill development to ensure all current and future student and faculty learning needs are met, whether online or on campus.

The pandemic perpetuated these circumstances with the immediate and unexpected transition to online learning. Although the urgency of this situation initially called for agility over quality in online course delivery (Bates, 2020; Educause, 2021), several aspects of this experience have prompted many institutions to reimagine what deliberate, purposeful, and well-conceived learning experiences will need to look like on the path ahead (Naffi et al., 2020).

Framing Analysis

Bolman and Deal (2017) define a *frame* as a coherent set of ideas or beliefs that shape how we see what is happening in the world around us. They have identified four frames that can be used to interpret various organizational processes, such as decision-making, strategic planning, communicating, and approaching conflict, among others. These have been categorized as *structural*, *symbolic*, *political*, and *human resources*. Although the OIP will address the problem primarily through the structural and human resource lens', it recognizes that some contributing factors require drawing from all four frames. Therefore, the symbolic and political frames will be integrated into subsets of the other two in the following sections.

The Structural Frame

The structural frame is generally concerned with optimizing processes and creating efficiency within organizations (Bolman & Deal, 2017). As mentioned previously, at Snow Island College, these include the rules, policies, standards, and operating procedures that help govern conditions of work and ways of completing specific tasks such as allocating resources, delegating responsibilities across the organization, and reporting to governing bodies. Formal authority is often defined through hierarchical structures where people with titles of dean, director, manager, and supervisor are tasked with ensuring the work being done aligns with institutional strategies and objectives (Bolman & Deal, 2017). Within this context, Black (2015) highlights distinguishing characteristics between those in academic leadership

roles and those in service departments. According to his findings, the former is often based on principles of collegiality, whereas the latter is more focused on delivering operational efficiencies.

Because the CTL encompasses both types of roles in its portfolio, we have a unique perspective on how different parts of the institutional system impact and contribute to the overall student learning experience. We play a significant role in supporting, maintaining, and adhering to the various systems and processes associated with teaching and learning practices (Brown, 2015; Forgie et al., 2018). These include course development processes, program quality assurance standards, media production, implementation of new technologies, academic research, and faculty development programming.

Coordination in this context is often guided by institutional directives from above and managed through formal structures such as institutional policies and procedures. Bolman and Deal (2017) refer to this as *vertical coordination*. For example, the provincial Ministry of Higher Education sets program development standards and approval processes, and compliance is met through the guidelines stated in the program development policy. This directly impacts the sub-structures that dictate program alignment, instructional hours, credit loads, and transferability. Similarly, course design policies and procedures provide a roadmap for designing learning experiences, producing learning objects such as videos, diagrams, and illustrations, and establishing how learners will demonstrate their ability to meet learning outcomes through appropriately challenging and meaningful assessment strategies.

Bolman and Deal (2017) claim that top-down coordination of these processes, systems and structures contributes to the architecture necessary for pursuing our institution's strategic goals. However, lateral coordination within these processes is also required. For example, light structures such as design loops, rapid prototyping, and innovation processes (Setser & Morris, 2015) at the production level often involve more informal exchanges and increased flexibility. This often necessitates effective coordination of diverse specialties or functions from different units. Drawing from the human resource and political frames, Bolman and Deal (2017) maintain that coordinating across departmental

boundaries requires a certain amount of diplomacy and an intentionally designed structure for dividing the work and coordinating multiple efforts. Of specific relevance to the problem being addressed are the challenges associated with ensuring these diverse efforts mesh.

As the PoP states, within our centre, individual departments perform well in terms of their own goals, but when considering the system-wide goals, tensions often occur. From a structural perspective, the tensions associated with allocating work are defined as *differentiation,* while coordination of diverse efforts after distributing responsibilities is *integration* (Bolman and Deal, 2017). Of equal relevance are the previously noted principles of *ambidexterity theory* and what Benner and Tushman (2015) call the productivity dilemma. When some teams are brought together, different interpretations of the top-down information flow (exploitation) and the bottom-up information flow (exploration) create tension between needing to produce or create efficiencies and the need to innovate. Examples include meeting production targets in course development versus innovating in areas such as new approaches to course design (Uhl-Bien & Arena, 2018).

Human Resource Frame

Making connections between an organization's people to its overarching strategy requires an analysis using the human resource frame (Bolman & Deal, 2017). Bolman and Deal (2017) claim that when organizations invest in human capital, they benefit from a talented, motivated, loyal workforce. Their employees are also more productive, innovative, and willing to go over and above to get their work done. Moreover, Tierney and Lanford (2016) maintain that creating a culture that fosters innovation and creativity involves four conditions: diversity of people; proficiencies and opinions; intrinsic motivation instead of external rewards; and autonomy of employees. Cultivating a climate that fosters these qualities requires an organizational philosophy or credo that makes them explicit and translatable into specific management practices (Bolman & Deal, 2017).

Snow Island College's comprehensive institutional plan has identified people development and employee engagement as key contributors to "excellence and success." Likewise, institutional priorities and strategies focused on equity, diversity and inclusion, and health and wellness have provided the groundwork for attracting, developing, and retaining employees whose values, strengths and skill sets are in strong alignment with those of the college. However, as Bolman and Deal (2017) emphasize, having a plan is only one part of the equation. Although it does provide direction, actual practice makes it a reality. For the Centre for Teaching and Learning, part of meeting the goals outlined in these strategies has been focused on developing leadership capacity at all levels of our centre. From a complexity leadership perspective, this entails incorporating interventions that target both human and social capital and interpersonal dynamics (Clarke, 2013).

As Bolman and Deal (2017) suggest, groups in organizations can be beneficial or detrimental when addressing human issues. Parker (2011) identifies open communication and trust, clear roles and work assignments, and shared leadership, among others, as characteristics of an effective team. These attributes tend to align with how teams in the CTL function within their own units. However, members have expressed that role confusion and lack of clarity can sometimes lead to conflict and even mistrust when cross-functional teamwork is required. Therefore, drawing again from Bolman and Deal's (2017) political frame, it is helpful to view the CTL as coalitions of different individuals and interest groups, each with unique values, beliefs, information, and interests that influence their perceptions of reality. When trust is strong among these groups, this tends to enable an appreciation for the diversity that exists. As an added benefit, Tierney and Lanford (2016) argue that inherent and acquired diversity are linked to positive effects on an innovative climate.

From the human resource perspective, CTL team members have become accustomed to filling specific roles in their own departments, such as contributors, collaborators, communicators, or challengers (Bolman & Deal, 2017). However, drawing again from the political frame, these preferred

roles become less clear in a different group dynamic, particularly when it leads to a redistribution of power. In some cases, informal group norms that govern how one group functions and conducts itself contrast with those of another group. The human resource frame sees the need for individuals to confront this conflict to develop new relationships. At the same time, the political frame provides the arena to air these conflicts and realign power. Some groups in the CTL have found useful tactics to promote cooperation and participation by forming new coalitions and boundary-spanning partnerships. Others are less open to exploring opportunities that may indicate a new social order and subsequently changes or modifications to their perceived understanding of the environment in which they work, including its values and vision of the future. Here, Bolman and Deal's (2017) symbolic frame focuses on how we use meaning to create a culture and set direction in the face of uncertainty and ambiguity. As new relationships begin to take shape within the centre, symbolic forms and activities, such as rituals, ceremonies, and storytelling, form the foundational aspects of the CTL culture and are necessary to establish our unique identity and character within the institution.

Guiding Questions Emerging from the Problem of Practice

This section of the OIP identifies two guiding questions concerning challenges and factors that have contributed to the problem being addressed. More specifically, they provide inquiry around the structural and relational implications associated with redesigning an organization for increased adaptability, innovation, and strategic foresight.

Question One: To what extent do structural elements in the CTL's organizational design support efforts for collaboration, developing strategic foresight, adaptability, and innovation?

As our institution continues to navigate the various transitions occurring in our external environment, our ability to address the learning needs of an increasingly diverse student body and the evolving teaching needs of faculty has been stretched to capacity. As such, we have found it necessary to coordinate and align the work of the various departments to be more adaptive and innovative in our

response to institutional demands. However, as Birkenshaw and Gibson (2004) note, balancing alignment and adaptability can be challenging. For example, until recently, structures and systems across the CTL were mainly managed and maintained within the confines of the departments responsible for them. However, a host of changes in our external environment – new technologies, new student demographics, learner expectations, and government mandates – have prompted our centre to redefine our purpose to our learning communities and, in effect, question the overall effectiveness of such a siloed infrastructure. In a similar vein to the question being addressed, Buckingham Shum and McKay (2018) ask, "how can an institution architect itself to innovate pedagogically and analytically in order to tackle substantial, strategically important teaching and learning challenges?" (p.25). In other words, to put this in the context of the CTL, how can our teaching and learning support systems and structures be designed and developed for a more sustainable impact?

Nadler and Tushman (1997) suggest that two types of structural elements will make the transition to a more adaptive and innovative model possible. The first is *information technology*, which allows teams to connect with each other and with others outside of the organization wherever they are. They suggest that information technology will also enhance collaboration and teamwork. The second structural element they suggest is the *innovative use of teams* as the foundation for a new organizational *architecture*. Their notion of the term architecture is defined by the way an organization structures and coordinates its people and processes to sustain itself over the long-term, regardless of shifts in its external environment. They define "teams" specifically as the collective knowledge, skills, opinions, and creativity that can be leveraged from a diverse grouping of jobs and functions, rather than each to their own. Therefore, to further elaborate on the question, future viability in accordance with our environment must also be considered.

Question Two: To what extent does the organizational design fit with people's values, beliefs, and mindsets?

Where innovation is more about a process (Tierney & Lanford, 2016), culture is more about how we think, behave and work (Setser & Morris, 2015). To expand on this, Setser and Morris (2015) offer a metaphorical definition of culture as "the water an organization swims in" (p.7). Here, they allude to the policies and practices a team creates and the values, mindsets, and daily habits of the groups and individuals that occupy it. Setser and Morris (2015) maintain that culture in this setting needs to be deliberately built, maintained, nurtured, and discussed over time. As identified in the Leadership Problem of Practice section, some CTL teams have been more receptive to our transition than others. For those that have resisted, there tends to be a general reluctance to explore other possibilities in terms of process or practice in fear that it might not provide the same results they are accustomed to experiencing.

However, despite generally being recognized for its negative connotations, resistance can also be seen as a positive force that captures the complex implications of change. For example, what might appear to be disrespectful or irrational opposition, could stem from an individual's desire to protect the organization's best interest (Piderit, 2000). Another reason may be less about disagreeing with the change, but rather a lack of understanding of its nature and how it might impact their work and role within the larger organizational context (Kezar, 2018). Part of addressing this is developing better communication around change and mechanisms for knowledge sharing and sense-making (Clarke, 2013; Siemens et al., 2018; Uhl-Bien et al., 2007). These tactics will be discussed in further detail in subsequent sections and chapters of this OIP. The following section will outline a leadership-focused vision for change within the CTL that addresses the questions raised in this section while providing further context around the problem of practice they are directed at.

Leadership-Focused Vision for Change

At Snow Island College, some CTL departments have gained professional recognition (Educause, 2020) for their skills in course development, program design and evaluation, and educational

technologies. This comes amidst increased enthusiasm by many academic programs to capitalize on innovative learning models to offer more low-cost, flexible, student-centred experiences. These learning design teams are positioned favourably to be high-impact agents of change within our centre and, due to the nature of their work, have expansive influence across the institution. For these reasons, they often assume informal leadership functions (explicitly or implicitly specified within their role) and added duties to support institutional initiatives. Their creative approaches to project management and stakeholder engagement, ability to lead agile design processes (Educause, 2020), and integrate ideas from multiple sources and perspectives (Ramos-Torrescano, 2017) make these teams invaluable to our institution.

However, as mentioned previously, addressing change initiatives also necessitates greater partnerships and coalitions by tapping into the skill sets and expertise of other service units within our centre, such as faculty developers, librarians, student accessibility experts, assessment specialists and learning system technicians. The challenge with this broader inter-disciplinary approach is how to effectively collaborate and address the need for increased agility (Educause, 2020), explicitly when new ideas or ways of doing things challenge existing practices and deeply rooted principles (Educause, 2020; Setser & Morris, 2015).

Historical Context

Before 2018, a general lack of cross-functional collaboration could be partly attributed to the physical distribution of CTL services across campus, which limited opportunities for interaction among the various groups. It also impeded the flow of information between departments. As a new dean at the time, I noticed very little collaboration between the various teams - even those where the connections between roles seemed most apparent. Although an organizational chart would show the CTL as one large unit on paper, it was very disconnected overall. As such, our heavily siloed system was restricting

any effort or opportunity for cross-fertilization of ideas between different disciplines (Siemen et al., 2018).

In 2018, an endowment to the college allowed the institution to reimagine our teaching and learning support model. Through an extensive re-design of the library and learning commons, we were able to bring all ten CTL departments to one common central location. The overarching goal was to create stronger partnerships between the various units and provide a more cohesive service model to our learning communities. The space design was guided by concepts from institutional strategies and extensive stakeholder engagement, including students, staff, faculty, and our Indigenous community. Design themes included cultural awareness and competency, accessibility, collaboration, inclusion, community, and relationships (Niitsitapi Strategy, 2021).

The space was also being designed at the same time the Niitsitapi strategy was being developed. This allowed us to learn from institutional engagement with Indigenous students, knowledge keepers and our campus elders. We learned it was important to design a space that visually honoured Indigenous culture and traditional keepers of the territory. Design elements included visual markers such as the footprints of the buffalo, circles from the teepees, and text and video narratives throughout the space as a constant reminder to honour the land and culture of the Blackfoot people. Following the opening of our new space, we were also honoured with the Blackfoot name Niitsitapi'ksimptaan, by our campus grandfather. The name means a place for 'real thinking' and is meant to celebrate the learning journey of all who use the space. This includes what it means to sit on the land marked by the footsteps of First Nations, Metis, and Inuit for generations before us.

Although bringing these units together was a success in many ways, it also created both tensions and opportunities around functionality and perceived identities among the various departments. Some teams quickly found ways to learn more about each other and work more effectively together. However, it also revealed redundancies in processes and misaligned or conflicting goals when comparing

workloads and service features among different CTL units. Shifting to more of a partner model, as opposed to what was previously made up of independent services, brought to the surface conflicting ideologies and polarizing views for how our centre should respond to institutional priorities and the many external pressures we were facing. Brown (2015) notes that our response to change, particularly in a higher education context, presents itself in two ways: the degree of change and the tempo of change. He suggests that because most colleges and universities are unsophisticated in dealing with both, cultural issues are bound to be part of any activity associated with large-scale change and transformation. This is especially typical for institutional change that aims to rectify existing problems with agile solutions (Brown, 2015).

The situation escalated when budgetary restrictions imposed by the provincial government started creating higher levels of uncertainty and concerns over job security. This generated an 'us' versus 'them' environment that pitted some departments as rivals rather than collaborators. Bolman and Deal (2017) confirm that from a political perspective, the combination of scarce resources and divergent interests often equates to this type of conflict.

Future State

My long-term vision for this OIP is to create conditions for multidisciplinary teams to work more effectively together while bringing new knowledge, viewpoints, innovation, and creativity to their collaborative work. As our institution navigates a reorientation around student success, this will require experimentation and exploration of alternative course models, new approaches to learning space design and creative uses of technology. It will also continue to test our capacity for taking on new projects and our ability to respond to shifting institutional demands. This will involve being proactive in the ongoing implementation of institutional strategies in our daily work, the things we create, and how we behave in our relationships with others. It also necessitates establishing more holistic support services that involve

collaborative approaches to solving complex problems and building stronger connections and relationships with our external communities.

Although this OIP does not focus on any one issue concerning equity, ethics, or social justice, it is built on a foundation that recognizes diversity, trust, participation, and openness as essential to change and transformation. This involves creating processes, structures and a culture that supports adaptation through knowledge sharing and enriched diverse social networks. These include ethical approaches to innovation that consider the needs and perceptions of *change recipients* (Deszca et al.,2020). Recognizing that responses to change can vary from resistance to active support requires cultivating conditions for empathy and understanding, as well as mechanisms for open communication and interpretation.

Change Drivers

According to Whelan-Berry and Sommerville (2010), there are several ways to define *change drivers*. However, they are most often depicted as the events, activities, or behaviours that enable the implementation of change. Considering my agency to lead the implementation of this OIP effectively, the engagement of mid-level leadership from all ten CTL departments is critical. As previously stated, this involves honing their ability to manage the "entanglement" between our centre's bureaucratic and emergent functions (Uhl-bien et al., 2007), including the knowledge flow from adaptive to administrative structures. It also includes cultivating conditions to foster effective adaptive leadership in places where innovation and transformation are needed.

Clarke's (2013) model for complexity leadership development expands on this notion by incorporating structure, culture, and processes as the primary factors that encompass the social system within an organization. Together each plays a part in the development of distributed knowledge sharing and augments social capital across all organizational units. Clarke (2013) has also identified *organizational learning*, *networked conditions*, *shared leadership*, and *learning behaviour* (individual

leadership skills and knowledge) as other conditions necessary for developing a social system capable of supporting adaptation. The former three will be discussed here, while learning behaviour will be discussed in the next section as part of organizational change readiness.

Organizational Learning

Organizational Learning involves understanding how and under which circumstances organizations learn (Kezar, 2018). According to Clarke (2013), this occurs at three distinct levels: the individual level (perceiving and interpreting), the group level (interpreting and integrating), and the organizational level (integrating and institutionalizing). Mechanisms for facilitating organizational learning include introducing new ideas, procuring and transmitting information, interpreting data, systems thinking, professional development, and learning from mistakes (Kezar, 2018). For example, some departments in the CTL use methods and tools such as learning analytics, feedback cycles of data collection, and user experience design processes to inform decisions. These tasks are beneficial for improving our design of tools and learning experiences that aim to help students and faculty meet their desired teaching and learning outcomes.

Networked Conditions

In the CTL, the products, services, and experiences we provide often require a dynamic array of emerging technologies, collaboration between various kinds of expertise (both within CTL and beyond), and coordination among various geographically dispersed networks. These networks also shape the foundation of society and our education system (Siemen et al., 2018). This includes relational ties, social exchange, frequency of interconnectivity, knowledge-sharing mechanisms, and communication patterns that connect one structure, process, or person to another (Clarke, 2013). According to Siemen et al. (2018), these types of networked conditions are fundamental to processes associated with transitioning from conventional thinking to thinking in systems and complexity.

For those of us leading change, comprehension of networks and their functionality is critical to designing a more sustainable future. Siemen et al. (2018) note that there are merits to a networked organization where information flow is rapid and individuals have increased autonomy. However, as leaders, we need to recognize that there is also a competing need for stability. Effective management of this tension requires higher levels of trust and openness (Schein & Schein, 2018), constant transparency and democratic engagement at all levels of the organization (Siemen et al., 2018).

Shared Leadership

Shared leadership has been defined as when more than one individual from a group contributes to the team's leadership for influence and to maximize team effectiveness (Bergman et al., 2009). According to Clarke's (2013) *Complexity Leadership Development Model*, leadership needs to be distributed across the organization to maximize access to available intelligence. This presents leadership as something that can be passed from one individual to another depending on specific tasks or challenges that arise (Clarke, 2013). According to the literature, teams that follow a shared leadership approach experience higher levels of trust and cohesion, greater consensus, and less conflict than teams that do not (Clarke, 2012; Dresher et al., 2014; Kezar & Holcombe, 2017). Kezar (2018) adds that organizations that employ shared leadership approaches that encompass both top-down and bottom-up leadership may have the most potential in bringing long-term changes to their organization.

Kezar and Holcombe (2017) note that certain types of vertical leaders are necessary to help cultivate conditions for these less traditional forms of leadership. Sveiby (2011) refers to this as a *benevolent hierarchical leadership* structure, which can act as a catalyst for these types of shared leadership structures to exist. He indicates that it is rare to impossible for a "pure" state of shared leadership that does not involve some characteristics of hierarchical leadership, which reiterates my role as a facilitator of the processes to be foundational for these interactions to occur.

Organizational Change Readiness

The COVID-19 pandemic has already transformed the education landscape at Snow Island College, much like other institutions across the country. The impact of successfully moving an entire institution to online learning and remote work is a promising indicator of our system's ability to adapt and navigate the shifting circumstances that extend beyond the walls of our institution. Our centre's new centralized location has also created more favourable conditions for interdisciplinary action and teamwork in our response to institutional initiatives and the various external pressures we are facing.

From a metaphorical perspective, we can now more easily be defined as an interconnected whole (Jackson, 2000) where each factor influences and is influenced by other factors in the system (Setser & Morris, 2015). From this stance, we are already on a pathway to developing a deeper understanding of the laws that govern the relationships between each of our parts and sub-parts. This knowledge will help us determine the relational aspects affecting the connectivity of our people and the systems and structures that can improve the technical efficiency and efficacy of the system in which we operate. Our interconnectedness will also help us gain perspective on what is required for sustainability over the long-term (Jackson, 2000).

To further conceptualize this notion is Wheatley's (2006) analogy of living systems which defines each organism within a system as having a clearly defined sense of its individual purpose within the larger sphere of relationships that contribute to shaping its identity. As such, our centre is ready to employ a collective approach to the long-term vision for change by redefining conditions for multidisciplinary teams to work more effectively together while bringing new knowledge, viewpoints, innovation, and creativity to their collaborative work.

Competing Internal and External Forces Shaping Change

Change agents may view change as a priority and have others ready and willing to help facilitate the process; however, there may be implicit barriers thwarting the organization's capacity to engage in the change processes effectively (Kezar, 2018). To address this, Holt and Vardaman's (2013)

multidimensional and multilevel construct emphasizes individual and structural factors as indicators of the organization's readiness for change. Analysis factors within this framework include members' cognitive and emotional readiness and the circumstances that will either enhance or inhibit the acceptance and implementation of change.

The CTL's Individual and Collective Readiness for Change

As previously noted, many departments in the CTL are already familiar with supporting and promoting the processes associated with evolving practices in teaching and learning. In this context, terms such as change agents or change initiators (Deszca et al.,2020) could be used to describe their informal leadership roles in our institution. These are terms often used to define those who motivate, instigate, and provide a vision for change (Deszca et al., 2020; Whelan-Berry & Sommerville, 2010). Their efforts often include introducing new technologies that impact how courses are delivered to introducing new types of programming that challenge existing structures and systems, for example, accelerated learning pathways or badging credential systems.

Holt and Vardaman (2013) state that success in these circumstances is dependent on the coordinated efforts of many interdependent individuals. For example, an ideal course design process would involve instructional designers for their expertise in course design, curriculum experts to ensure quality standards are met, media experts for creating learning objects, and the library for access to research materials. Therefore, the successful facilitation of these change initiatives is often reliant on generating support and enthusiasm from others in the organization (Kezar, 2018; Piderit, 2000).

Following the transformation of our space, a cohort of mid-level leaders started meeting regularly with me and our associate dean to discuss day-to-day operations across the centre and our strategic direction. From a change readiness perspective, this group is well-positioned to establish more cohesion in our strategic processes and operational duties by focusing on what Holt and Vardaman (2013) refer to as organizational difference factors. These include collective commitment, collective

efficacy and shared belief, and collective trust that leaders will act in the best interest of the organization and its stakeholders (Holt & Vardaman, 2013).

Holt and Vardaman (2013) further claim that when this type of interdependence is high, a shared psychological sense of confidence in collective capabilities may indicate readiness for change, even more so than individuals' confidence in their own abilities. However, a dichotomy between those who support change and those who do not can be a typical obstacle these change agents need to overcome. Holt and Vardaman (2013) have identified that resistance could be attributed to several factors at the psychological, individual level. These include appropriateness to the situation being addressed; the belief that management supports the change (principal support); feeling capable of making change successful (change efficacy); and the belief that the change is personally beneficial (valence). They have also identified structural factors that are reflective of the circumstances in which change is occurring. This includes the capacity to develop individuals' knowledge, skills, and ability in alignment with the occurring change.

Individual Level Development

Relevant to Holt and Vardaman's (2013) individual level of analysis is the final dimension of Clarke's (2013) model, mentioned in the previous section, which includes individual-level development. Here the focus is more on the individual behaviours of the social system. More specifically, it addresses the formal and informal leadership roles critical to harnessing creative capacity for distributed intelligence. In this context, formal leadership entails competence in facilitating the conditions for spontaneous and emergent leadership (Clarke, 2013). Accordingly, one of the criteria for this dimension is that individual leadership can coincide and interact in the same environment with other leadership configurations. Clarke claims factors that help shape the social system criteria include:

- supporting leadership behaviours such as organizing the work environment,
- facilitating interactions among individuals and groups, and

- detecting barriers to information flows within the organizational systems.

Although readiness may be mixed among some CTL stakeholders, there is enough synergy for change to move forward. The role of CTL mid-level leadership in supporting the vision for change acts as the catalyst for creating and maintaining conditions for individual-level development at all levels of the organization. In this context, leadership is bolstered by recognizing the existing strengths and weaknesses in their relationships with each other for a psychological sense of confidence in their collective capabilities to be established. On a similar note, the notion of psychological safety in team dynamics will be explored more in chapters two and three.

Chapter 1 Conclusion

This chapter began by introducing the contextual elements impacting the Centre for Teaching and Learning's ability to effectively champion and support institutional innovation and strategic initiatives. This was accomplished by exploring the relational and systemic nature of the problem through the lens of complexity leadership theory and its three entangled leadership roles: adaptive leadership (also referred to as *entrepreneurial*), enabling leadership, and administrative leadership (also referred to as *operational*). The framing section placed the PoP in the broader socio and economic contexts while employing Bolman and Deal's (2017) four-frame model, focusing primarily on the structural and human resource lens'.

Guiding questions for the PoP were centred on inquiry around the structural and relational factors that can either enhance or inhibit our centre's ability to innovate and adapt. The vision for change introduced in this chapter is to create conditions for multidisciplinary teams to work more effectively together while bringing new knowledge, viewpoints, innovation, and creativity to their collaborative work. I've also defined my approach to leading change in this context as influential, involving framing, facilitating, and leveraging opportunities for increased interactions while cultivating conditions that promote and strengthen social connectivity and emergent leadership across all

departments of the CTL. The chapter concluded with an analysis of the Centre for Teaching and Learning's change readiness.

Chapter 2: Planning and Development

Chapter 2 expands on the foundational information introduced in Chapter 1 by exploring the various ways in which complexity defines relationships and the conditions for adaptation. Moreover, Chapter 2 specifies how complexity and systems leadership models will enhance conditions for multidisciplinary teams in the CTL to work more effectively together while bringing new knowledge, viewpoints, innovation, and creativity to their collaborative work.

Leadership Approaches to Change

Given the organizational context within the CTL at Snow Island College and the problem of establishing a conducive, centre-wide atmosphere that enables innovation, strategic foresight, and collaboration, the change approach will require creating an infrastructure that can leverage the leadership of multiple people across our organization (Kezar & Holcombe, 2017). Therefore, the role of leaders in this realm is to collectively build, nurture and enable an adaptive environment that promotes adaptive functions throughout the organization (Uhl-Bien & Arena, 2017). As introduced in the previous chapter, this requires an integrative approach of engaging with complexity and the three complexity leadership functions of adaptive (entrepreneurial), administrative (operational) and enabling leadership.

The following sections will expand on these functions focusing on systems behaviour and the leader's role in leveraging networked connections and building adaptive capacity. The goal here is to focus on our centre's ability to acquire or expand its capacity for adaptive leadership; however, this does not stem from a leader-centric perspective. As noted previously, although my position has an inherently vertical disposition within the institution, I have never ascribed to traditional styles of leadership that are based solely on top-down decision-making processes. Instead, I have always gravitated to workplace environments where team members are empowered to express their opinions and make key decisions. However, I also recognize that there are certain vertical leadership functions necessary to help foster and support the spread of leadership across our organization (Kezar & Holcombe, 2017; Setser & Morris,

2015). My leadership approach in this context has been enlightened by a notion posited by Morrison et al. (2019), which brandishes leadership as an ideology that extends to all levels of our organization. This ideology is bolstered by a proclamation of shared values that can help us supersede the silos that impede creativity and innovation (Morrison et al., 2019).

In choosing a leadership pathway of interdependence, I aim to build the necessary conditions for others to accept and contribute collectively to our centre's adaptive leadership capacity. This will involve open, honest, caring, and attentive guidance from myself and our associate dean and boundary-spanning partnerships and collaboration between the diverse membership of our mid-level leadership collective. Therefore, this chapter is predicated on the notion of adaptive leadership development as a process that necessitates a variety of developmental experiences and the ability to learn from those experiences (McCauley & Van Velsor, 2003). This progression, in turn, aims to develop the CTL's capacity to enact adaptive leadership tasks needed for collective work while creating alignment across all ten departments. As McCauley and Van Velsor (2003) note, this type of leadership approach includes individuals, groups and the organization working collaboratively to explore and reset direction.

My role in this context is to help cultivate a culture across the CTL that fosters leadership empowerment. According to Kezar and Holcombe (2017) vertical leadership positions such as mine can help cultivate empowering environments by creating space for employees to express opinions, share ideas, and make key decisions. Within the complexity literature, such environments are referred to as *adaptive space* (Uhl-Bien and Arena, 2017), a concept that will be discussed in further detail in the following section.

Enabling Adaptive Space

As previously noted, adaptability is bolstered through the interconnectivity of networked systems and their agents (Siemens et. al., 2018; Uhl-Bien & Arena, 2017). For those of us in vertical leadership roles, creating networked systems encompasses creating conditions for interdisciplinary

teams to come together, share novel ideas and scale them across the broader institutional system. In the complexity literature, the outcome of the interchange in complex environments is referred to as *emergence*. Siemens et al. (2018) claim that emergence functions as a catalyst for ideas and concepts to materialize organically from the bottom up by those closest to the change pressures. This deviation from hierarchical structures gives rise to non-linearity, self-organization, and network cohesion (Acaroglu, 2017; Siemens et al., 2018; Uhl-Bien & Arena, 2018). Although many forces drive complexity, Morrison et. al. (2019) maintain that the primary challenge within networks is aligning members, resources, and efforts within a larger complex system. They claim that although the size of a network can be an indicator of its capacity, its efficacy is dependent on establishing protocols for working collaboratively.

The underlying factors driving complexity within organizations are increased interactivity through networked interactions and the redistribution of power across multiple levels (Uhl- Bien & Arena, 2017). This phenomenon results from information flows that connect people and instigate change in unprecedented ways. Collaboration from this standpoint involves linking, aligning, and harnessing resources in ways that mutually benefit networked agents while enhancing one another's capacity to work towards a common outcome (Morrison et al., 2019). Complexity leadership theorists claim that the role of leadership within these circumstances is to enable adaptive space by capitalizing on the tensions between the adaptive (entrepreneurial) system and the administrative (operational) system (Siemens et al., 2018; Uhl-Bien et, al., 2007; Uhl-Bien & Arena, 2017). Pressures that arise from these tensions are often needed to loosen the system up for change by disrupting current patterns of organizing, which inherently opens up adaptive space (Uhl-Bien & Arena, 2017).

As illustrated in Figure 1 in the following section, within adaptive space, emergence results from two complexity dynamics. The first is *conflicting*, which includes pressures to innovate and pressures to produce. The second is *connecting*, which involves linking ideas, information, people, resources, and

technology (Schulze & Pinkow, 2020; Uhl-Bien & Arena, 2018). In doing so, conditions are established that lead to a new adaptive order while successfully addressing the needs of a shifting environment (Uhl-Bien & Arena, 2018).

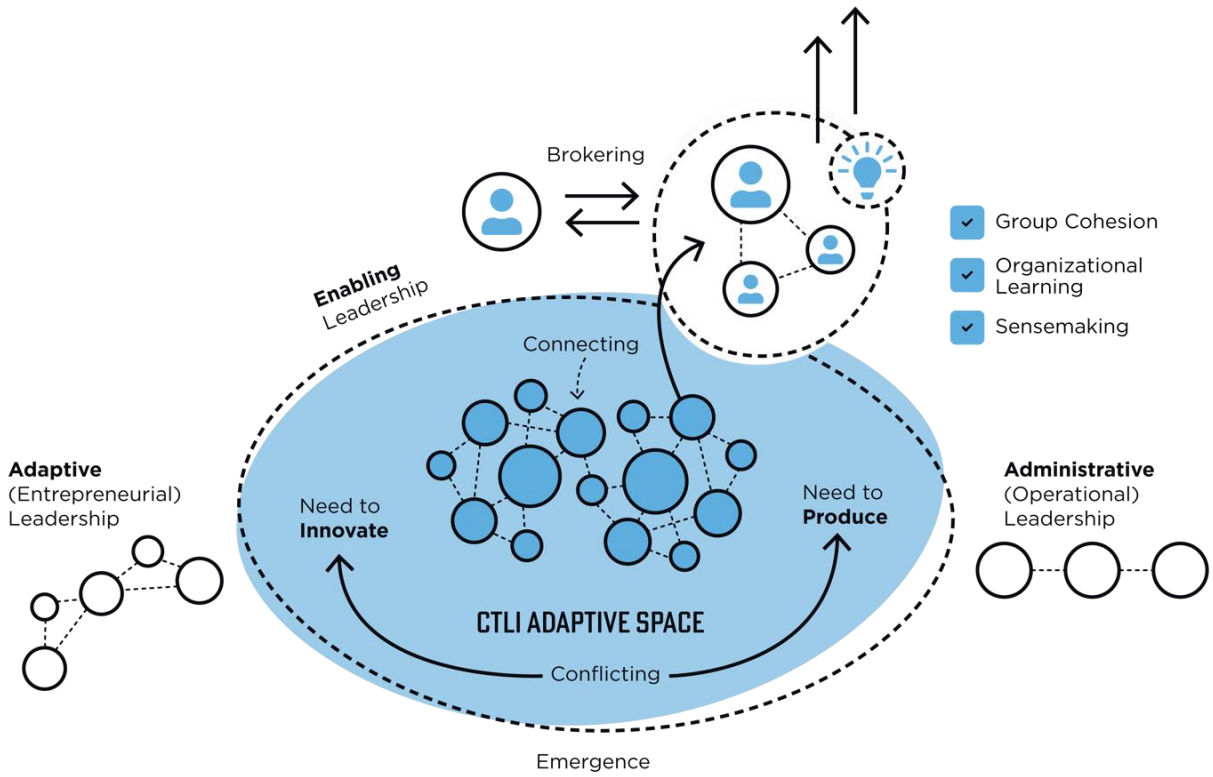
Adaptive Space as a Networked Structure

According to Uhl-Bien and Arena (2017), adaptive space is a networked structure created by pressures derived from complexity challenges that push members to interact and engage in ways that cultivate emergence and a new adaptive order. Uhl-Bien and Arena (2018) claim that leadership in this setting is typically much less hands-on and more behind the scenes than what is found in more traditional forms of leadership. Therefore, in my position as a dean, understanding how social interaction enhances the flow of information, ideas, and insight (Arena, 2021) within adaptive space is essential to creating the right conditions for adaptability to occur. Here, the objective is for adaptive responses to resist the pull to order while leveraging the collective intelligence of groups and networks (Uhl-Bien & Arena, 2017).

For the CTL, creating adaptive space entails a collaborative effort between myself, our associate dean and our department leadership to bridge individuals and groups from one team to those of another. Ideally, these connections will induce new opportunities for discovery, exploration, and the introduction of novel ideas. Uhl-Bien and Arena (2018) refer to this connection as *brokerage.* As illustrated in figure 1, they also note the importance of *group cohesion* as a network structure that provides a safe space for groups to test and iterate ideas, making them more amenable to scaling across the broader system. To function in an environment supportive of such risk-taking and experimentation requires an emphasis on *organizational learning* and *sensemaking* (Kezar, 2018), social cognition concepts introduced in Chapter 1. Fostering cohesion in this setting also requires trust and support between individuals, groups (Schulze & Pinkow, 2020) and leadership.

Figure 1

CTL Adaptive Space



Note. This conceptual framework incorporates concepts from complexity leadership theory and social cognition theory to hypothesize the CTL's *adaptive space*. It has been adapted from Uhl-Bien and Arena's (2017) original concept of adaptive space but also draws from the work of several other complexity leadership scholars. (Arena, 2021; Kezar, 2018; Uhl-Bien et al., 2007; Uhl-Bien & Arena, 2017, 2018).

As noted previously, my specific role in this progression entails facilitation, enabling and ongoing collaboration with emergent department leaders. This also involves overt messaging that encapsulates what tangible problems or barriers new ideas, and innovation will help overcome and what needs will be met through successful transformation (Setser & Morris, 2015). Kezar (2018) adds that from an ethical perspective, change agents seeking to establish trust in their organization will need to closely

assess relationships among groups, patterns of decision-making, historical aspects, and their processes and practices. The concept of trust as an ethical approach to leadership will be examined more closely in the final section of this chapter. The following section outlines an integrated framework for leading the change process.

Framework for Leading the Change Process

Many of the pressures currently impacting the CTL at Snow Island College require going beyond tinkering with existing systems and structures; they necessitate a fresh approach for engaging with complex organizational behaviour and system dynamics. In this section of the OIP, seminal and relevant contributions to the literature on organizational change management models and frameworks will be compared with more contemporary models that intentionally focus on change in the context of higher education and building cultures of innovation.

Two key assumptions form the basis for this section and the one that follows. The first includes anticipated resistance from some individuals and groups to leave behind time-honoured processes, practices and structures for new ones that have yet to produce evidence of effectiveness. The second is that mid-level leadership from across the centre is willing to play an essential role in facilitating and implementing the change process. This development includes helping others make sense of the change and establishing the necessary network conditions to connect people, processes, and information flows among CTL departments. In their work, Whelan-Berry and Sommerville (2010) support this notion of networked connection and recommend establishing a community of leaders from across the organization to support the vision for change and signal its importance to others. Therefore, beginning with the aggregate of CTL mid-level leaders, this process entails motivating all levels of teams and departments to be involved in embedding change into the organization and helping it take shape as the new status quo.

Scope of Change

Kezar (2018) argues that all institutions and the sub-units that comprise them have a set of values that guide behaviour and mindsets. These epitomize the core operating principles within the institution. They can also impact how groups and individuals respond to pressures being imposed on them. Kezar refers to the theory of first and second-order change to define how various degrees of change can impact the environment in higher education institutions. In its most simplistic form, *first-order change* occurs within existing structures and is consistent with prevailing values and norms. In other words, leaders do as much as possible to improve the current system (Setser & Morris, 2015). However, the scope of change is incremental (Nadler & Tushman, 1989; Setser & Morris, 2015) with minimal returns (Setser & Morris, 2015). By contrast, *second-order change* often conflicts with existing values and principles (Kezar, 2018; Maier, 1986). It can require individuals and groups to challenge preconceived assumptions and beliefs and explore new approaches to better align with the current environment (Kezar, 2018).

The notion of first and second-order change is parallel to the work of Nadler and Tushman (1989), who categorize change in two dimensions: the *scope of change* and the *positioning of change*. The first considers the subsystems of the organization versus the system as a whole. The second dimension involves mapping the change to key external events or influences (*relative changes)* or anticipatory changes (events that might occur). They have also classified change into four categories. The first is *tuning*, which includes incremental and anticipatory change. The second is *adaptation*, which involves incremental change in response to external events. The third, *reorientation,* is strategic in nature and based on anticipated events that may require a fundamental redirection. The final and most extreme type of change is *re-creation*, which requires a radical departure from past practices (Nadler & Tushman, 1989).

As emphasized throughout previous sections, the broader trajectory of this OIP aims to establish a centre-wide culture that enables innovation, cross-disciplinary teamwork, and collaboration

to better meet the evolving needs of our learning communities. Meeting this outcome while operating effectively in our current circumstances will require a change pathway that addresses both incremental (tuning and adapting) first-order change and second-order transformation (reorientation and re-creation). As Setser and Morris (2015) claim, this entails “fixing the system we have while simultaneously innovating the system we need” (p.8).

The process will rely on a collection of tools derived from various organizational methods, frameworks, and processes. Although the overarching model that will be used is Lewin's (1997) three-step change model, this OIP will demonstrate that Lewin’s approach to social and organizational change contains elements consistent with those of more contemporary theorists (Burnes, 2004). One example that will be applied is Setser and Morris' (2015) *Building a Culture of Innovation Framework*, which will be described in more detail throughout this section as complementary to Lewin's three-step change approach.

A third model that is compatible with both Lewin's (1997) model and Setser and Morris's (2015) framework is Nadler and Tushman's (1989) congruence model. Its underpinning qualities are consistent with organizational behaviour and systems theory. The congruence model will be introduced in this section but emphasized more in the following section as a diagnostic tool for critical organizational analysis, focusing primarily on the transformation process.

Lewin’s Three Step Change Model

Lewin’s (1997) three step change model is recognized as an influential approach to change. It was initially developed as a mechanism for resolving social conflict (Burnes, 2020). Although it has been criticized in the literature for being overly simplistic (Burnes, 2020; Levasseur, 2001; Shirey, 2013), its foundational elements of field theory, group dynamics and action research, stemming from Lewin’s earlier work, add a complex dynamic which serves as a model for other theories to be formed. Field theory in particular, provides a platform for determining how a person or group’s behaviour is a function

resulting from the interaction between the person and their environment. "Group atmosphere" is also referenced in the Lewin (1997) literature as a critical determinant in leading successful resolution of social conflict, which is relevant to the problem being addressed for its focus on cultivating a democratic group structure (Allport, 1997). Equally relevant are later publications of Lewin's work which further emphasize that the democratic process is complex and requires training and development of both leaders and group members to play their respective roles within it. This focus on training and development are foundational to the proposed solutions that will be expanded on in the next section of this chapter and throughout Chapter 3.

Lewin's (1997) change model involves three steps: unfreezing, changing (moving to a new level), and refreezing. Like what Uhl-Bien and Arena (2017) propose regarding loosening the system for adaptive space, Lewin's model suggests that to understand the system and all its parts, an unfreezing process must first occur within the system (Deszca et al., 2020).

Unfreezing

The unfreezing phase is centred on breaking down the beliefs and assumptions of those involved and impacted by the change process. As noted previously, when pressures cause a system to loosen up, this gives rise to new opportunities and understandings that might not have been present at other times (emergence) (Uhl-Bien and Arena, 2017). Although the Lewin (1997) model provides limited actionable criteria or guidance (Raza, 2019; Shirey, 2013) in each of its phases, it highlights the importance of evaluating the complexities within the organizational field (Raza, 2019).

Because Lewin's (1997) model does not spell out in detail which steps change agents need to follow to effect change (Levasseur, 2001), a more contemporary model by Setser and Morris' (2015) will be applied. Their framework for building a culture of innovation in higher education is instrumental in framing a theoretical approach for defining innovation culture in the context of higher education. It also provides a tangible diagnostic tool to help leaders determine which action steps need to be taken and

how to prioritize their progress. Figure 3 shows that complementary to Lewin's (1997) model, Setser and Morris' framework follows three iterative phases: catalyze, enable, and sustain, which in effect reflects the process of loosening the current system, transitioning to a new form, and then establishing the new form as the way forward. Consistent with the *functionalist systems* approach, which employs an ecosystem analogy that portrays the organization as an interconnected whole capable of adaptation, a series of seven factors and subfactors are represented as interactive and dynamic. They include leadership, communication, resource allocation, capacity, structure and processes, policy environment, and learning agenda. Jackson (2000) claims that this "organizations-as-systems" way of thinking stems from two allegorical strands. The first is dominated by a mechanical analogy and the other by an organismic analogy.

The tangible aspects of Setser and Moris' (2015) framework, such as a glossary of key terms, innovation scorecard, and rubric, are helpful for monitoring trends and sharing results. These can be used as vehicles for organizational learning and sensemaking to help individuals and groups understand why change is necessary. Further to this, interpretation of data, systems thinking and leveraging from multiple perspectives (Kezar, 2018) can be used to help shape people's understanding and interpretation of themselves, their work, and others involved in that work (Foldy et al., 2008). Kezar (2018) also notes that professional development towards the use of data may be necessary to create meaningful inquiry.

Clarke's (2013) leadership development model, introduced in Chapter 1, adds an intentional leadership approach for enhancing interdisciplinary cooperation and knowledge sharing with a similar emphasis on organizational learning. In addition, sensemaking serves as a mechanism to understand the context in which the CTL and its various departments operate. According to Ancona (2012), to conduct effective sensemaking, a leader must: 1) explore the wider system, 2) pursue alternative opinions, 3) test assumptions, and 4) iterate and act.

Change (Moving to a New Level)

The second stage in Lewin's (1997) model, the change phase, has qualities comparable to Uhl-Bien and Arena's (2017) definition of *adaptive space*, which looks at change as a process rather than an event (Shirey, 2013). From a complexity perspective, this phase enables networked interactions to make way for novel ideas, innovation, and learning in a system (Uhl-Bien & Arena, 2017). The fluidity of the environment also allows for experimentation and exploration, elements commonly found in innovation processes such as design thinking or human-centred design. Setser and Morris (2015) claim that clear and explicit directive from leadership to others on the team to test new approaches is essential, including risk-taking and learning from failure. They also highlight the importance of providing "on-ramps" for leaders at all levels of the organization to assess where they are at in the transformation process. In alignment with what was introduced in Chapter 1, this notion corresponds with Clarke (2013) and Holt and Vardaman's (2013) multidimensional constructs for assessing change readiness and developing leadership capacity in complex organizations.

It is not surprising that scholars of Lewin's (1997) model highlight uncertainty and fear of the consequences of adopting a change process as typical to this transitional phase (Mind Tools, 2021). For these reasons, sensemaking vehicles such as collaborative leadership among mid-level leaders, developing cross-departmental task teams, and creating a flexible vision (Kezar, 2018) are essential to creating shared meaning around the change and the process driving it. Ancona (2012) claims that effective sensemaking can enable leaders to explore the more comprehensive system better, map that system, and learn from it. In other words, sensemaking serves as a valuable tool for organizational learning.

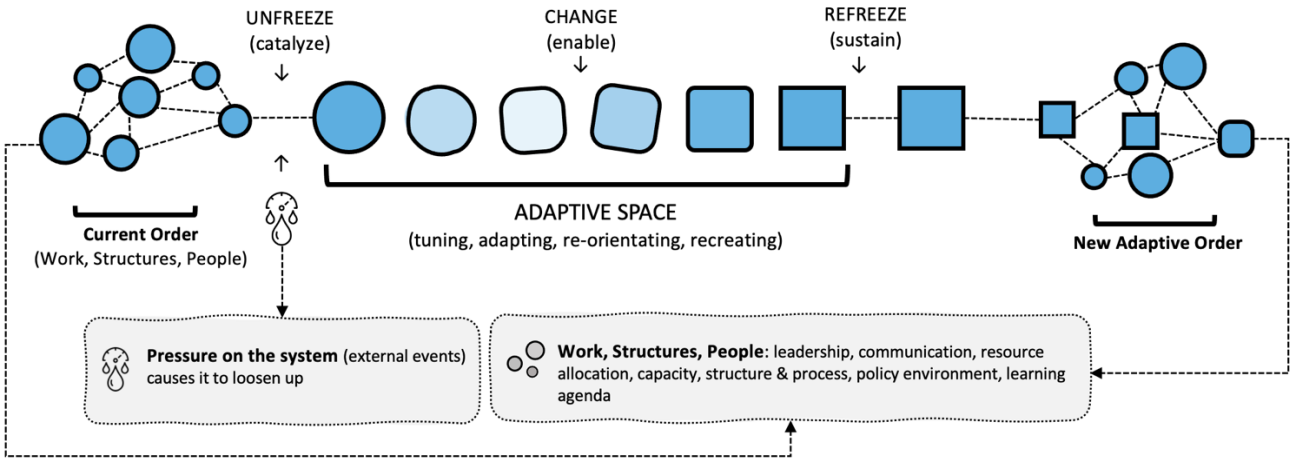
Refreezing

Just as Uhl-Bien and Arena's (2017) adaptive space concept that involves the loosening of the system is not intended to be permanent, neither is the unfreezing phase of Lewin's (1997) model. As

illustrated in Figure 2, Lewin's final stage, refreezing, focuses on stabilizing the change so that it can become embedded into other institutional systems, processes, and practices. Uhl-Bien and Arena (2017) refer to this as "the start to the pull to order" (p.12). The categorical factors associated with the "enable" and "sustain" phases in Setser and Morris' (2015) model also allude to a gradual transition back to stability. They maintain that at this phase, an effective and sustainable innovation culture needs to be deliberately managed, nurtured, and sustained over time with a focus on clear metrics and ongoing improvement.

Figure 2

An Integrated Model for Adaptive Order



Note. This model visualizes the progression of change in the CTL by integrating three change models and frameworks: Nadler & Tushman's (1989) congruence model, Setser and Morris' (2015) *Building Cultures of Innovation in Higher Education* framework, and Lewin's three step change model.

To summarize, Lewin's (1997) three-step change model has been chosen as the guiding framework for this OIP for its simplicity, and its focus on the transition people need to undertake to adapt to a new state of being (Airiodion & Crolley, 2021). As demonstrated in Figure 2, to address the complex nature of the change process, particularly during the periods of unfreezing and change, I have supplemented using other models and frameworks to compensate for the lack of tangible criteria and

detail within the Lewin model. The following section will continue with this approach by conducting a critical organizational analysis of our centre's ability to move through each step to establish a centre-wide atmosphere that is favourable for enabling innovation, teamwork, collaboration, and strategic foresight.

Critical Organizational Analysis

In sticking with Lewin's (1997) three step change model, this section of the OIP places the greatest emphasis on the transformation process, which occurs within the change phase, as illustrated in Figure 2. Consistent with the metaphorical theme of an ecosystem, it will focus on assessing interdependence within the system, including how the various parts fit and function together. As noted in the previous section, the primary diagnostic tool for critical organizational analysis is Nadler and Tushman's (1989) congruence model for its focus on organizational behaviour and systems theory, which have been common threads throughout the development of this OIP. Nadler and Tushman's (1997) later work on organizational design is referenced further to emphasize organizational adaptability's social and structural considerations. These will be further accentuated through Clarke's (2013) *Complexity Leadership Development Model* in the following section when outlining potential solutions to address the PoP.

Although this section considers the entire CTL system, the primary focus will be on my immediate scope of influence as a senior leader in the centre, which is the development of mid-level leadership, also referred to as mid-level managers. More specifically, it will provide an analysis of mid-level leadership's capacity to build and leverage dynamic capabilities that enable adaptive space and the emergence of new opportunities when responding to external pressures and institutional strategic priorities.

A Metaphorical Perspective on System Behaviour and Interconnectivity

Complexity leadership theory holds some of the basic tenets of the functionalist perspective and its associated metaphors of ecosystem or organism (Jackson, 2000), which was alluded to in the previous chapter when referencing Wheatley's (2006) analogy of living systems. In this sense, organizations are viewed as interconnected, where each factor affects and is affected by other factors in the system (Setser & Morris, 2015). Uhl-Bien and Arena (2017) suggest that adding the word 'rich' to interconnectivity indicates that when things interact, they change one another in unexpected and irreversible ways. Although the original notion of functionalism stems from Durheim's theoretical concept for promoting and maintaining stability (Crossman, 2020), complexity leadership theory promotes emergent behaviours that involve self-organization and adaptation through agent-level interactions (Siemens et al., 2018).

Siemens et al. (2018) further define complexity as a theory of adaptation that conveys how change manifests within systems and the principles and mindsets required to thrive in unstable environments. Balancing the interplay between the operational (administrative) and adaptive (entrepreneurial) functions in an organization (Siemens et al., 2018; Uhl-Bien et al., 2007; Uhl-Bien & Arena, 2017) creates multiple systems within the organizational structure that are both ordered and chaotic, and therefore capable of producing unpredictable events and relationships. This can lead to novel patterns of change and adaptation throughout the organization (Morgan, 2006). Jackson (2000) adds that the knowledge we gain from understanding system behaviour in an organization can be used to improve the efficiency and efficacy of the system and its sustainability over the long-term.

Organizational Congruence

In correlation with the metaphorical representation from above, Nadler and Tushman (1997) claim that every factor of the organization, including the external environment in which it functions, is subject to perpetual change. They further state that problem-solving within organizations involves collecting, analyzing, and interpreting information to identify the specificities of the problem and

relevant responses. Therefore, reflecting on the questions posited in Chapter 1, the following section has been developed on the premise of three overarching considerations for analysis. The first examines the structural elements within the CTL that can either enhance or inhibit our ability to meet our strategic objective of increased collaboration, strategic foresight, and innovation across all ten centre departments. The second considers how those structures impact and influence the cultural, social, and informal behavioural patterns of groups and individuals who make up our organization as a whole (Nadler & Tushman, 1997). The third explores the role of mid-level leaders in enabling informal emergence and their capacity to coordinate the contexts in which it evolves (Uhl-Bien et al., 2007).

Each of these considerations will be addressed using Nadler and Tushman's (1989) congruence model. The model is based on the concept of an open system that interacts with its environment through input from external sources and then translates those to the output of products, services, and performance. Nadler and Tushman emphasize that the most effective way to organize is driven by congruence (fit) of four key elements: informal structures and processes (including culture), formal structures, people (individual level), and work. Figure 2 from the previous section illustrates the relationship between the elements in Nadler and Tushman's (1989) congruence model and the key factors in Setser and Morris's (2015) framework for building a culture of innovation.

Input

According to Nadler and Tushman (1997), three broad categories of input impact an organization in various ways. These include the *environment*, *resources*, and *history*. For the CTL, our environment is influenced by the institution's strategic direction and its response to the larger trends and shifts in social, political, and economic relationships occurring outside the walls of our campus. Each of these, directly and indirectly, influences future models of higher education and practices in teaching and learning. They also impact changes in student population, types of programming that are offered, and how academic credentials are recognized in other sectors (e.g.

government and industry). To reiterate an example from Chapter 1, the recently imposed performance-based funding model that ties government funding support to achieving specific labour market goals (Strikwerda, 2020) is an environmental input that has placed demands on the institution to increase efforts toward serving the needs of the labour market as a condition of future funding.

For the CTL, inputs like this play an integral part in determining how we allocate CTL resources, the types of learning and development support we offer to students and faculty, the processes and measures we use for designing and evaluating curriculum, and the quantity and types of resources we make available. Meeting these demands also conflicts with other environmental factors, such as the need to operate more efficiently, sustainably, and responsibly (Educause, 2021).

Resources encompass the full spectrum of assets and resources available to us across the centre, including staff, technology, capital, and information (Nadler & Tushman, 1997). Each CTL team (e.g. librarians, technologists, media designers, instructional designers, faculty developers, among others) has specific knowledge and skills to support and maintain essential systems and structures that make up our teaching and learning ecosystem. However, according to Nadler and Tushman (1997), this also includes less tangible assets, such as how others perceive our contributions to the larger organizational climate.

The final element of input, *history*, is concerned with functions of the past. Nadler and Tushman (1997) argue that the way an organization behaves today is often a result of events that have been shaped over time. For the CTL, some departments have been a part of the institution since its inception over sixty years ago. Many of the individuals who work on these teams have also been employed with the college in some capacity for over twenty years. Their experiences over that timeframe have largely influenced their perceptions around strategic decision-making, leadership, past responses to changes in the environment, and how institutional values and beliefs have been shaped over time (Nadler & Tushman, 1997).

For individuals who have invested such a large part of their careers into building the current organizational structures, systems, and processes, transitioning to something new is often seen as a threat to the legacy that they have built. Setser and Morris (2015) claim that innovation is a cultural change that requires a substantial shift in mindset and approach when leaving behind the familiarity of previous practices, particularly if they were once proven successful in a former context. Deszca et al. (2020) refer to the common factor of turning to past practices that may have once been effective but are no longer appropriate in the current environment as "failures of success" (p.41). In these situations, organizations learn from past successes and failures and develop systems, policies, rules, and procedures around these experiences to ensure the preservation of those deemed to have had a positive effect on the organization and protect against those that historically have not. Like Deszca et al. (2020) have noted, a common force in fuelling resistance within the CTL is the development of certain assumptions and patterned responses that have influenced perceptions of how things should function despite a changed environment that makes them no longer appropriate.

Adding to the complexity of our organizational make-up are departments that have emerged more recently due to environmental forces often linked to the ongoing transformation in the larger sphere of academia. Most notably is the evolution of learning design, influenced by the growth in flexible delivery models such as online and blended learning. For CTL teams working in this field, uncertainty, knowledge development, innovation and adaptation are part of everyday work. For these teams, working in unstable environments has also proven to fuel their creative capacity and their resilience to changing circumstances in their surrounding environment.

The historical influences associated with both newer and more established organizational structures within the CTL impact the strategic decisions, leadership behaviour within each department, and how those departments engage, interact, and connect with the broader system.

Strategy

Buller (2014) argues that the standard approach post-secondary institutions take to promote transformation and strategic planning is often not worth the effort put into it. These sentiments are shared in earlier literature by Mintzberg (1994) who differentiates between *strategic planning* and *strategic thinking*. They claim that the former of the two is merely strategic programming that articulates elaborate strategies or visions that already exist. In contrast, the latter is more about synthesis, intuition, and creativity (Mintzberg, 2014). Buller (2014) adds that unconventional methods such as scenario planning and establishing a strategic compass are more in line with the culture of higher education. Both of these concepts will be discussed in further detail in Chapter 3.

Consistent with complexity leadership, models focused on understanding system dynamics are often regarded as a more effective way to enable learning, creativity, and adaptive capacity within colleges and universities (Kezar & Holcombe, 2017). As noted in Chapter 1, the CTL's current strategy includes a vision for driving a new era of course design, program development and learning support (Centre for Teaching & Learning, 2020). It also claims to foster innovative teaching practices, high-quality learning experiences, and environments that unleash every learner's potential. This strategy was developed in collaboration with mid-level leadership and through extensive stakeholder engagement at all levels of the organization. Its four key focus areas include: connecting our communities; people culture and human potential; innovation in teaching and learning; and emergence and agility. Each focus area is also aligned to a broad set of strategic objectives for meeting our centre's vision and the strategic direction set by our comprehensive institutional plan (CIP) and provincial mandate.

Outputs

According to Nadler and Tushman (1997), *outputs* are defined by what an organization produces, how it performs, and how effective it is. The CTL’s consolidated understanding of technology and emerging trends in research and pedagogy provides faculty and institutional leadership outputs to make evidence-informed decisions around best practices and the adoption of emerging technologies

and teaching models. As noted previously, as high-impact agents of change within our institution, we play a vital function in addressing and overcoming the educational challenges we are experiencing. In some cases, this has also helped set our institutional direction around issues such as equity, diversity, inclusion, and student success. However, Nadler and Tushman (1997) claim that outputs do not only represent effectiveness at creating products and services; they also include the performance of the people within the organization.

For the CTL, some departments are seen as the catalysts for institutional change. However, a general disconnect and lack of interactivity between other departments have perpetuated siloed behaviour and become major stumbling blocks in our centre's ability to respond more holistically to the increasingly complex demands imposed on us. In other words, this disconnect impacts our ability to produce the necessary outputs that the institution requires to address some of its most pressing challenges. Examples include student retention efforts regarding academic learning support and implementing relevant teaching models, structures, and support mechanisms.

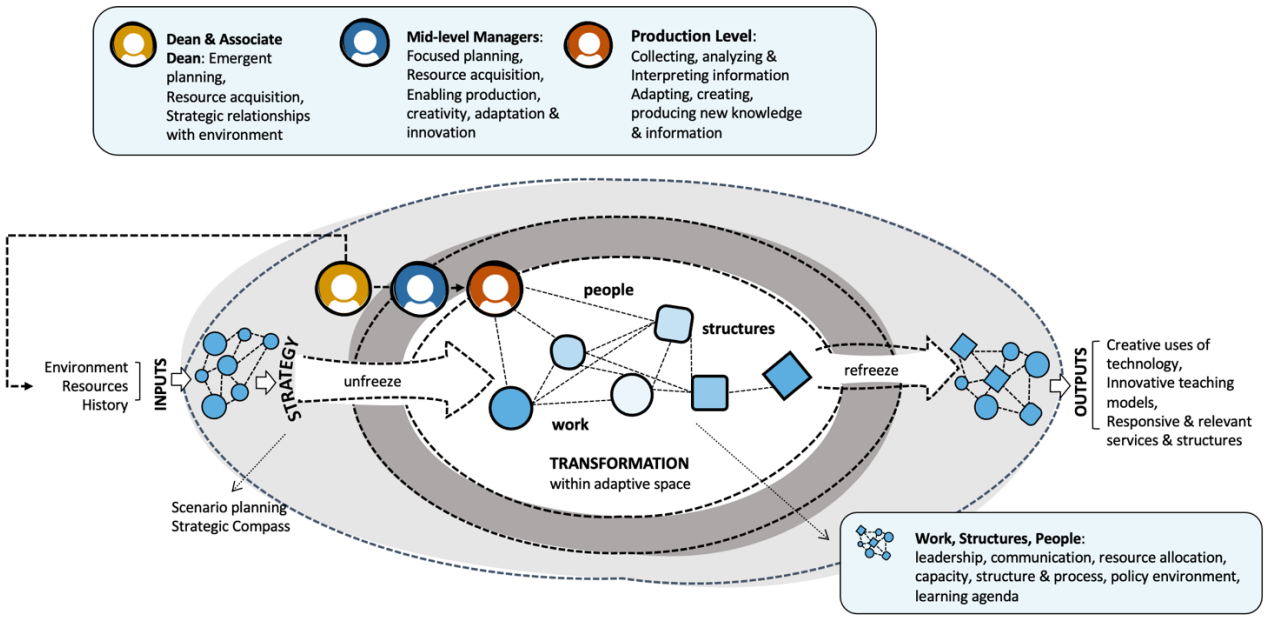
Transformation Phase

Uhl-Bien et al. (2007) claim that emergent outcomes vary across the different levels of an organization. For example, as illustrated in Figure 3, adaptive outputs at the upper level of leadership (deans, associate deans and above) are concerned primarily with emergent planning, resource acquisition, and strategic relationships with the environment. For mid-level leaders, emergence is about more focused planning and resource allocation to enable the production level of the organization to adapt and produce new knowledge and innovations. How each level of leadership functions and the degree to which other elements are aligned can influence the transformation process, which is at the core of the congruence model. It includes four key interrelated elements: the work that needs to be done, the people (individuals) who complete the tasks associated with the work, formal organizational structures, and informal structures (Nadler & Tushman, 1997). Drawing from the complexity literature,

the enabling leadership function is crucial during this transformational phase to catalyze adaptive leadership and give rise to emergence at the production level of the organization (Uhl-Bien et al., 2007).

Figure 3

CTL Organizational Congruence Within Adaptive Space



Note. Figure 3 builds off Figure 2 by incorporating key elements of Nadler and Tushman's (1989) congruence model, Lewin's (1997) three step change model, Setser and Morris' (2015) Building a Culture of Innovation Framework, and Uhl-Bien and Arena's (2017) adaptive space concept.

Kezar and Holcombe's (2017) research suggests that addressing the ambiguous and ever-changing realities we are currently experiencing requires focusing on organizational processes that prioritize collaboration, shared leadership and local decision-making. A consideration relevant to the problem being addressed is that complexity and system leadership theories promote the team and collaborative leadership processes that challenge our organizations to expand beyond recognizing individual skills and achievements. Instead, Kezar and Holcombe maintain that the emphasis should be

on creating conditions that emphasize interconnectedness, collective accomplishments, and a shared vision of the future.

According to Uhl-Bien and Arena (2017), leaders enable adaptive responses by creating conditions such as information flows, which allow agents to find each other and connect over common needs, purpose, or perspectives. In the CTL, there are certainly examples that demonstrate success in this regard, particularly among teams that have become accustomed to working together. However, gaps exist within our broader organizational structure in places where these information flows are blocked, inhibiting our ability to be adaptive. Another gap is that siloed or hierarchical decision-making processes coupled with limited leadership growth and development opportunities within and among some departments limit our ability to be adaptive overall or recognize the importance of adaptability in terms of future sustainability. Siemens et al. (2018) note that even when change is successful, the experience of constantly pushing against linearity to enable network performance can be a significant drain on resources. Because bureaucracy is inevitable in our organization, the challenge in situations requiring a sense of urgency is figuring out how to act as a complex adaptive system while operating in a hierarchical structure.

Possible Solutions to Address the PoP

What has become apparent in the process of defining the symptoms and effects of this problem is that maintaining a sustainable model will require a collective understanding of how to lead our centre for ongoing innovation and adaptability (Uhl-Bien & Arena, 2017). The process of reorientating all organizational components across the centre to a more unified service model has increased our system's overall complexity. Already, it has required various levels of tuning, adapting, reorientating, and even recreating (Nadler & Tushman, 1989) many sub-structures and systems to better fit the current context. However, despite efforts across the centre to pioneer a more cohesive and collaborative approach forward, some departments have struggled to find ways to operate more nimbly and cooperatively in

our new environment. As next-generation learning environments, new learning technologies, or teaching and learning models become institutional priorities, CTL teams will need to become skilled at collectively identifying trends, trajectories, and signals (Educause, 2020) from our external environment to better prepare to make creative and complex decisions, produce frequent iterations of learning solutions and become accustomed to accepting and expecting feedback and changes in requirements (Torrance, 2014).

The physical relocation of many departments was only one piece of shifting an entire system towards our current vision. This section of the OIP outlines three potential solutions to help keep us on course while addressing the gaps outlined in the previous section. The premise of each solution stems from the notion of emergent collective action, which is defined by Schreiber and Carley (2008) as an exploration process where the adaptive and enabling leadership roles advance the coevolution of human and social capital. This, in turn, results in improved conditions for fostering collective intelligence.

Each solution considers time, cost, receptiveness (of employees), and impact. This breakdown is represented in figures 4 – 8, following the overview and description of each solution. Though the former three indicators are self-explanatory, *impact* has been adapted from the "intensity" classification in Nadler and Tushman's (1989) congruence model. It relates to the overall severity of the change and its impact on the CTL as an organization. In other words, it includes the degree to which the solution will cause discomfort to some individuals, the group's state of being or discontinuity or disruption to current operations across the organization.

Solution One: A “Practice Field” for Interdependent Action

Peters and Smith (1998) claim that using the ethos “practice field” provides the notion of a relatively safe space for learning to occur while acknowledging that proper accountability lies beyond this environment, with those participants who must own the outcomes. Considering Lewin’s (1997)

three-step change approach, unfreezing could begin with mid-level leaders collectively conducting a system analysis to identify and learn from discrepancies or pressure points among the various processes, structures, and dynamics across the centre that impact cross-disciplinary collaboration, innovation and creative problem-solving. This also stems back to Nadler and Tushman's (1997) *congruence hypothesis*, which states that the greater degree of fit among various factors in a system, the more effective the organization will be. As presented in the previous chapter, an analysis of our current context sees several mid-level leaders already focused on developing structures, culture, and processes across departments that together characterize what Clarke (2013) has coined the social system.

The first level in Clarke's model for complexity leadership development includes network conditions (social exchange, frequent interconnectivity, knowledge sharing mechanisms, among others), shared leadership, and organizational learning as key criteria for system-level development and adaptability. Because these conditions are not consistent across the entire CTL, mid-level leadership could benefit from a planned and deliberate approach to assessing what currently exists and then testing new ways to engage with each other. Assessment and testing would be done through adaptive leadership constructs and mechanisms that foster and promote interaction, interdependence, and bottom-up dynamics (Schreiber & Carley, 2008; Van Velsor, 2008).

This solution is also inspired by the "connected leadership" approach proposed by Van Velsor (2008), which is based on the notion of leadership development but does not begin with the individual leader. Instead, this approach aims to focus first on enhancing interactive dynamics in a system. Van Velsor (2008) describes this type of leadership development initiative metaphorically as a "practice field" for interdependent action. The goal of this proposed solution would then be to instigate a practice of leadership development that strengthens our centre's capacity for emergent, collective processes and adaptive leadership responses. It would begin first by identifying what they can do to improve the current system and build the conditions for a new system to emerge (Setser & Morris, 2015). This notion

also considers the previously noted ambidexterity theme by addressing the tension between our centre's need to capitalize on existing capabilities and the need to create conditions that promise future viability. A multi-level adaptive leadership approach to designing adaptive organizational systems and structures (Uhl-Bien & Arena, 2018) would also consider change spurred on by environmental inputs.

Evaluation of Solution One

This solution would include analyzing current systems and structures and opportunities to test out different ways of doing things. The process would be bolstered by a facilitated leadership process that supports activities for promoting knowledge flows, interdependencies where they already exist, and brokering new opportunities for interactions where there are currently gaps (Uhl-Bien & Marion, 2008). Time would be required to complete an organizational assessment of the current context, aggregate results, and share the trends. A modified version of Setser and Morris' (2015) *Building a Culture of Innovation in Higher Education* rubric and scorecard could be a useful starting point in this process. As noted, this model has factors that are like the broader elements outlined in Nadler and Tushman's (1989) congruence model (work, informal structures, formal structures, and people) and includes seven factors and sub-factors to self-assess our progress in building a culture of innovation. The factors include: leadership and communication (catalyze); resource allocation, capacity, structure and processes (enable); and policy environment and learning agenda (sustain).

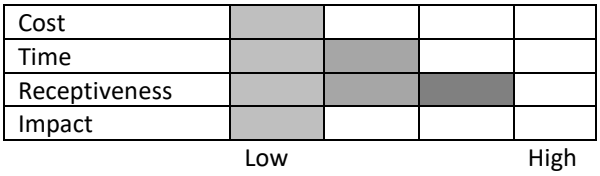
The mid-level leadership team currently meets twice monthly. As such, one of these meetings could remain focused on current operations - in other words, maintaining the current system (Setser & Morris, 2015). The other meeting could be repurposed for focusing specifically on assessing and reimagining the system we need. This group has already started building relational ties with one another. Although some relationships are stronger than others, overall receptiveness to this approach that aims to improve our system should be well-received. Careful facilitation by myself and the associate dean would ensure all individuals have engaged authentically through methods that foster trust and

respect. This will be an important factor for individuals to feel receptive to the notion of sharing lessons honestly, even when analysis shows that something is not working or could be done differently. Beginning with Setser and Morris' (2015) scorecard will first allow individuals to self-reflect on where they fit on the continuum to building an adaptive and innovative culture within their departments.

Additional time would be required for more extensive stakeholder engagement sessions to ensure all levels of the organization have opportunities to contribute to design efforts and provide feedback on their experience. However, the overall impact on current operations would be minimal at this stage, for activities would be largely conceptual or experimental. It would be essential to allocate dedicated funds to invest in resources associated with testing and exploring new technologies that may assist in the process such as communication platforms, design tools, and learning resources. However, Snow Island College's current array of enterprise tools (e.g. Microsoft Teams, Sharepoint, Planner, among others) combined with methods for ideation and brainstorming should suffice for the most part-making overall costs for resources minimal. Figure 4 illustrates the dimensions of adoption for solution one.

Figure 4

Dimensions of Adoption Solution One



Solution Two: Action-Reflection Engagement

Returning to the transformation phase of the congruence model, Nadler and Tushman (1997) claim truly effective organization design is an ongoing process that requires constant modification of strategic objectives. This change process entails defining and redefining jobs, shaping work processes, motivating performance, and framing the patterns of formal relationships and interactions that take

shape over the long-term. They further state that workplace design will need to keep adapting to stay aligned with its strategy. Although aspects of workplace design are also addressed in solution one by focusing on systems and structures, the focus for solution two would be primarily on leadership behaviour development, which, as noted in the previous section, presents a gap in our current organizational context.

To meet our strategic goals and produce an adaptive environment and culture within the CTL, solution two again targets the mid-level leader collective. However, the aim is to eventually broaden adaptive leadership practice beyond this group to become more of a systemic approach across all levels of the organization. Based on Van Velsor's (2008) action-reflection engagement process, this development would involve three core components – action learning leadership teams, action learning team coaching, and plenary session intensives. At its core, leadership teams are enabled to tackle real organizational challenges and issues collectively using tools and methodologies that prompt reflection and enhance knowledge exchange (Skipton Leonard & Lang, 2010; Val Velsor, 2008). Van Velsor (2008) claims that through this process, teams are focused on understanding how leadership is being accomplished in complex collaborative work.

Evaluation of Solution Two

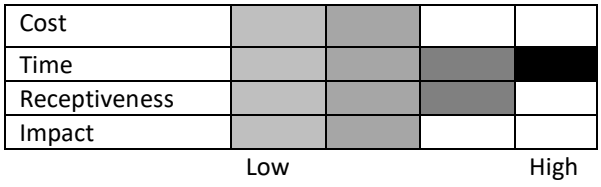
According to Van Velsor (2008), the plenary intensives last two to five days, typically occur twice over six months and are meant to ground and support the team's collaborative work. Therefore, mid-level leaders would need to deliberately carve out time in their schedules for engaging in this part of the process. There could be costs associated with hiring an external agency to facilitate these sessions. However, considering our current fiscal climate, a more cost-effective solution would include the associate dean and me (dean) as facilitators. Tools and methodologies to help surface inquiries and assumptions, promote meaningful dialogue, and foster engagement beyond the boundaries of

individuals or coalitions already in place could be derived from available engagement toolkits such as the IDEO Methods Kit (n.d.) or Liberating Structures (McCandless & Lipmanowicz, 2013).

The overall reception to solution two would be strong by some group members, though others may resist, especially if trust is not established. Clarke's (2013) research shows that structural patterns, including frequency and patterns of communication, design agreements, and knowledge management procedures, can influence the emergence of ensembles. Understanding how these patterns work can help determine sequences of alignment between structural conditions, emergent leadership behaviour, and cohesion among groups. Therefore, the design of the core components in this solution (action learning leadership teams, action learning team coaching, and plenary session intensives) would need to be focused less on motivating followers and more on how these patterns can be used to foster trust and respect within social exchanges (Clarke, 2013). Clarke refers to building social capital within the network as an important element in leadership development. They further claim that cognitive, social capital is cultivated through developing shared systems of meaning and using mechanisms for meaning-making. In contrast, relational social capital is built through reciprocal social exchanges that foster and promote trust and respect (Clarke, 2013).

Figure 5

Dimensions of Adoption Solution Two



Solution Three: Innovation Task Teams

Solution three deviates from focusing solely on the mid-level leadership group to pulling from all levels of the organization to create innovation task teams. The purpose of these teams would be to take on large-scale strategic initiatives, execute innovation work (Setser & Morris, 2015), and navigate

intensive problem-solving situations (Nadler & Tushman, 1989). Their primary function would be to enhance coordination, create information flows between various units, and pool expertise from across the centre. Nadler and Tushman (1989) refer to these roles as cross-unit groups. However, they share key features of shared leadership, particularly in structure and function. For example, they would be flexible configurations that can change based on the initiative's circumstances or the problem.

Formal and informal leadership within these teams could also be shared vertically or horizontally depending on relevant expertise (Kezar, 2017). They are also characteristic of leadership relevant to ambidexterity theory as described by Uhl-Bien & Arena (2018), which entails individuals choosing how to divide their time between job alignment-oriented activity and adaption-oriented activities. Nadler and Tushman (1989) claim that although these teams are typically created on an as-needed basis, it makes sense to design them into a formal structure in situations where cross-unit projects are expected to be common. Mid-level leaders would then play an enabler role by creating adaptive space for these teams to take shape.

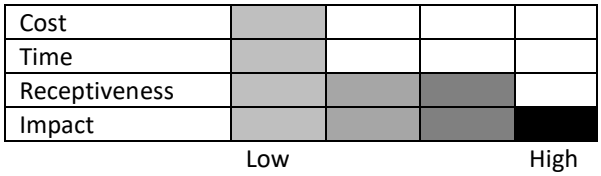
Evaluation of Solution Three

Although the impetus for these innovation task teams is often driven by top-down initiatives (Uhl-Bien & Arena, 2018), the goal is for leadership to emerge from all levels of the organization without seeking permission from superiors. Therefore, for this scenario to be plausible, mid-level leaders (as supervisors) would need to be supportive of initiative-taking and willing to loosen some core rigidities within their departments and governance structures to explore and enable adaptive processes to emerge. This solution may face some resistance from certain mid-level leaders, particularly those that are currently following more of a leader/follower binary (Kezar & Holcombe, 2017). However, beginning with a small pilot scenario that does not tax our current system too heavily may gain acceptance and a desire to scale more broadly, particularly if the benefits become evident within a reasonable timeframe.

Again, to fully benefit from these structures, shared leadership processes and structures would need to be authentic and deliberately designed (Clarke, 2013; Kezar & Holcombe, 2017). Kezar and Holcombe (2017) claim that conditions should include team empowerment, autonomy, shared purpose, external coaching, accountability mechanisms, and shared cognition. Clarke (2012) adds that leadership (in this case, mid-level leaders) can play an influential role by bolstering leader-team exchanges through encouragement and providing more opportunities that ensure task team members can participate fully in decision-making.

Figure 6

Dimensions of Adoption Solution Three

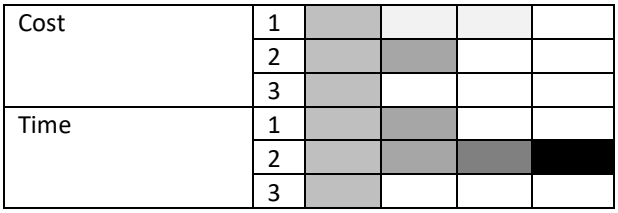


Comparison of Possible Solutions

Figure 7 offers a detailed comparison based on four measures: cost, time, receptiveness, and impact. Each solution is reflective of existing tensions within the current CTL structural framework. Each, in some capacity, also aims to reorientate different layers of our centre's system to cultivate emergence and adaptive order (Uhl-Bien & Arena, 2018). Combined, they represent a systemic multi-level approach to addressing the problem. As such, all three solutions presented will inevitably be part of the larger trajectory in meeting our change objective.

Figure 7

Dimensions of Adoption Comparison of Three Solutions



Receptiveness	1				
	2				
	3				
Impact	1				
	2				
	3				
		Low			High

If a fourth solution were considered, it would have been to stick with our current direction. In this case, certain parts of our system continue to evolve, and pockets of individuals and teams would continue to establish new, collaborative routines for sharing knowledge and collaboration. However, we have learned from our present context that in other parts, innovation would remain sporadic to non-existent. Some department leaders have demonstrated varied responses from active resistance to passivity when the role of adaptability and innovation are brought up in strategic dialogue. Thus, it is likely that little to no effort would be invested in framing how these qualities could help our centre and our institution address our most pressing challenges.

Therefore, calling this a solution seems arbitrary at most. The outcome would result in more significant gaps in our system. Some departments would attempt to trudge ahead, and others would remain fixed and ultimately excluded from the rest of the organization.

A sustainable future for Snow Island College will entail constant adaptation from all corners of our institution, including all service departments in the CTL. Achieving this will require a multi-level approach which all three solutions can achieve. Therefore, a hybrid phased approach that scaffolds solution one, solution two and then solution three is the preferred resolution. Beginning with a multi-level approach to designing adaptive organizational systems and structures (Uhl-Bien & Arena, 2018), as presented in solution one, would essentially generate an outline of CTL's organizational design (Nadler & Tushman, 1997), which is necessary for enacting leadership development in solution two and eventually an adaptive leadership culture across all levels of the CTL in solution three. Similarly, the tool proposed in solution one by Setser and Morris (2015) in this context provides a tangible blueprint for an

innovative and adaptive organizational culture while setting the stage for ongoing adaptation and sustainability.

One of the initial challenges to overcome with this phased approach will be orientating the mid-level leadership team on their role in the change process, particularly considering the spectrum of comfort levels that exist among these members for dealing with change and uncertainty. Beginning with a group discussion to identify how we would like to work together will conceivably help resolve any significant differences and make it easier to interpret the results of our systems analysis in solution one. However, a considerable shift in how the team acts and reflects on what is learned will require coordinated action among individual team members. Edmonson (2012) uses the term "organizing to learn" to describe the necessary mindset this team of leaders will need to acquire first and foremost to promote what she also deems "teaming behaviours" and "collective learning." Edmonson also claims that collective learning includes asking questions, talking about mistakes, seeking feedback, and experimentation. The following section will explore a collective inquiry approach that will promote and encourage sharing, experimenting, and learning in this type of collective learning environment.

Collective Inquiry

Schwandt (2008) argues that to effectively profit from the interchange of multi-disciplinary thought and knowledge building, which will be essential in the implementation of all three solutions, we must pursue paths of inquiry that broaden our perspectives. He adds that structuring interactions to include acts of reflection, dialogue, inquiry, and diversity can also influence the structure of collaborative work routines and future work procedures.

Using appreciative questioning techniques to help manage conversations will guide collaborative efforts and shape our actions around seeking opportunities rather than focusing solely on problem analysis (Morrison, et al., 2019). According to Cooperrider and Whitney (2005) the Appreciative Inquiry (AI) approach involves a cooperative and systematic exploration of what gives life to an

organization in its most effective and capable state. Therefore, rather than focusing on CTL's deficits, an AI approach will involve positive questioning that aims to strengthen and heighten our positive potential. With our centre already on a change trajectory that began with the move to a new location followed by progression in many areas towards stronger interdisciplinary collaboration, an AI approach would use a coevolutionary lens and cooperative search for accounts of past, present, and future capacities (Cooperrider & Whitney, 2005).

The implementation process will also draw from *Design Thinking*, a human-centred methodology that provides a solution-based formula for solving complex problems (Dam & Siang, 2020). The inductive and deductive nature of the design thinking model is like other well-known inquiry cycles such as the *Plan, Do, Study, Act* (PDSA) model in that it is not necessarily linear but does follow an iterative process that includes five stages (Cleary, 2015). They include *empathise*, *define* (the problem), *ideate, prototype*, and *test* (Dam & Siang, 2020). Langley et al. (2009) suggest that focusing on the human dimension of change can help us understand how people engage with each other and within a system.

The human dimension also places an emphasis on understanding how people are affected by change and the importance of treating their ideas with respect and dignity (Northouse, 2022). As such, conversations will need to be managed by applying good framing questions at various stages of implementation, which will also help those involved in the change process work together in new ways and towards new solutions. Morrison et al. (2019) claim that inquiry methods that use "How might we…" questions rather than using words like "can" or "should" can help defer judgement and create more opportunities for engagement and new levels of collaboration. They add that adaptive leaders develop skills in asking adaptive questions in which the answers might require further exploration and iteration. They also suggest that when leaders can resist the urge to control, new solutions will appear.

Exploring the potential of these solutions will give rise to new levels of trust and collaboration among those who are engaged in the change process (Morrison et al., 2019).

Leadership Ethics Involved in Organizational Change

As previously noted, guiding organizational cultures around change (Siemens et al., 2018) is often contingent on the dynamic nature of human interactivity (Schwandt, 2008). In addition, each change process is often replete with ethical challenges and choices (Kezar, 2018) for leaders in their attempt to influence others to reach a common goal or outcome (Northouse, 2022). This *influence* aspect of leadership can also carry with it the ethical responsibility of being sensitive to how certain actions and decisions can affect others. As Northouse points out, the research on ethical theory provides a set of principles that can be used to help leaders think about how to act and be morally decent. These can generally be categorized into two types: theories about *conduct* and theories about *character*. Both will play a vital role in the implementation of all three solutions, particularly in how we engage others in the change process and how we respond to the ideas they contribute.

Establishing an Ethical Climate in the CTL

Brown et al., (2005) note that because of their influence, leaders play a pivotal role in setting the ethical tone of the organization. This includes attending to the needs, values, and moral development of their followers but also setting standards of moral responsibility and functioning. On a similar note, Hazy (2012) provides the notion of a unified leadership function that focuses on leadership activities that cultivate and foster shared identities and ethical conditions for interaction and engagement among organizational participants. They further state that shared identities and ethics can create unity within an organization and a common understanding of acceptable rules for interaction.

Expanding on what has been a constant theme throughout this OIP, Kezar and Holcombe (2017) claim that traditional models with principles rooted in bureaucracy, authority, and social control are futile in times of turbulence and uncertainty. Although elements of bureaucracy continue to exist in

every post-secondary institution (Manning, 2018), those of us in formal leadership roles need to pay close attention to the dynamic aspects of our internal and external environments to position our organization more favourably for adaptability (Schulze & Pinkow, 2020). Hazy (2012) maintains that shared logic around the rules for interacting with others and establishing continuity around these rules can provide system predictability for participants even when the world around us is in constant flux. They claim that establishing *unifying leadership* defines the organization's ethics, which is encompassed by its common beliefs, identities, and the expectations of those who participate.

As the dean of our centre, I must pay attention to the social structures that represent social configurations, such as groups, teams, and units, and the patterns that govern their behaviour with the rest of the organization. Schwandt (2008) claims that these patterns can arise from various mechanisms such as rules, language, cultural values, and norms. They can also emanate from relationships among various agents.

Promoting Diversity

According to Schulze and Pinkow's (2020) research, contributing factors to an organization's adaptative capacity are promoting diversity and providing employees with opportunities to connect and engage with others in the organization. This is also supported in the complexity literature relating to complex dynamics, which states that when agents bring diverse worldviews, preferences, and values to interactions, this provides exposure to ideological diversity needed for innovation and creativity (Uhl-Bien & Arena, 2017). Drawing further from complexity science and social cognitive theory, Schwandt (2008) iterates the importance of these interactions in the coevolution of individual personalities and their understanding of 'self' as they interact with other individuals in the realm of the collective's social structure. For this OIP, I refer primarily to the social structure of the mid-level leadership collective while acknowledging the ripple of influence relationships within this group can have on the social structures within the rest of the organization. For example, Setser and Morris (2015) claim that when innovation is

explicitly encouraged, celebrated, and studied by leadership, members across the organization feel empowered to try new approaches. They add that this includes when failures are routinely shared and openly discussed, tolerated, and seen as an essential part of the innovation process.

The notion of diversity in relation to innovation is also reiterated in Tierney and Lanford's (2016) innovation research, which suggests the diversity of people within an organization is linked to their innovative potential. They claim that innovation at a fundamental level is a social process that connects individuals from different disciplines with different skill sets and competencies. They also state that creativity is dependent upon the ability of individuals to understand and build upon the work of others, which is enhanced through social interaction. In this context, the exchange of ideas and feedback from peers provides opportunities to consider alternative perspectives. It also helps individuals see the limitations of their own work and push beyond existing boundaries (Tierney & Lanford, 2016).

To further address the previously noted gap concerning existing siloes and some departments' ability to adapt to shifting circumstances, mid-level leaders can increase these interactions and propel organizational adaptability by leveraging network structures. They can also develop broader leadership capacity by internalizing distributed and shared leadership models across the organization (Clarke, 2013; Schulze & Pinkow, 2020). To support this, Kezar and Holcombe (2018) point to the importance of support structures and professional development to promote and foster a culture of trust and respect. As their research proposes, I will work with mid-level leadership to explore and establish safe and productive workplace cultures that can make shared leadership more successful.

Cultivating a Climate of Trust, Transparency and Support

Whelan-Berry and Summerville (2010) claim that while higher-level leadership, such as managers, deans, and associate deans, is vital to change processes, leadership support from all levels of the organization is critical to successful change implementation. For the CTL mid-level leaders to enact change through the proposed solutions it will entail both vertical and horizontal support from myself,

the associate dean, and their mid-level leadership peers. The interrelationships and behaviour of this group are essential to setting the tone for how various teams across the centre will work together. Edmonson (1999) claims that learning behaviour among work teams consists of activities carried out by team members and how they collectively process data and use it to adapt and improve. Learning behaviour can include asking for feedback, knowledge sharing, and asking for help. It also includes openly and honestly talking about errors and failures (Edmondson, 1999; Schulze & Pikow, 2020; Setser & Morris, 2015).

McCauley and Van Velsor (2003) have identified several individual capabilities that reflect how individuals interact with others in a social system. Among these are values of honesty and integrity, which propagate trust and credibility in others. Edmonson (1999) refers to *psychological safety* as the shared belief that the team is safe for interpersonal risk-taking. She also notes that psychological safety needs to be a team or group level construct that depicts the team instead of the individuals on the team, further emphasizing that group members must perceive it in the same way. On a similar note, Schein and Schein (2018) claim that more personalized relationships on teams can create psychological safety and therefore enhance bi-directional communication and trust.

However, Morrison et al. (2019) point out that “trust” is one of those terms that can be interpreted differently by different people. As such, they have provided a definition of trust that is based on the alignment of words and actions. They further note that rules of civility are essential to establishing and maintaining an environment where trust can thrive. In the CTL, for this level of trust to be developed within and among the various teams, commitment and follow-through need to be both the expectation and the rule within the various team environments.

Conclusion Chapter 2

Chapter 2 expanded on a multidimensional leadership approach that can benefit from the leadership of multiple people across the organization. A scaffolded three-phased reorientation of our

organizational design for adaptive leadership capacity was proposed as a solution to the problem being addressed. The intended outcome of this solution is that once teams learn the value of working interdependently across department borders, it will bring increased mastery in collaboration and innovation processes, thus eventually becoming a changed aspect of our CTL culture.

Uhl-Bien and Arena (2017) note that when systems and structures are in their initial stages of development, they are often created out of opportunities to innovate and create social or economic value. As this chapter has emphasized, these conditions often materialize as fluid, self-organizing structures capable of adaptation and change in the face of pressures from inputs in their environments (Uhl-Bien & Arena, 2017). As operational structures get put into place and become more established, our ability to self-organize eventually becomes more restricted. Uhl-Bien and Arena refer to this as the "pull to order" (p.10). When this happens, it creates a tension between the operational systems and structures push for equilibrium and the adaptive systems push for flexibility, innovation, exploration, and discovery (Siemens et al., 2018; Uhl-Bien et al., 2007; Uhl-Bien & Arena, 2017). Therefore, lessons from Chapter 2 have stressed that if the CTL can resist the bias to order (Uhl-Bien & Arena, 2017), it is possible to create a system where the operational structures are not dominant, and the adaptive potential is not stifled. This is further supported through an environment where trust and openness are fostered and promoted at all levels of the organization as foundational to how we work, learn, and engage with others.

Chapter 3: Implementation, Monitoring, and Communication

To conclude this OIP, Chapter 3 will unveil a strategy for implementing, monitoring, and communicating the change process. The intended outcome of a successful implementation for the CTL will be to build a future-ready organizational architecture. As noted in the previous chapter, this concept alludes to how we structure our people, systems, and processes to maximize our unique capabilities over the long-term regardless of ongoing changes in our external environment (Nadler & Tushman, 1989). For the CTL, this depicts a conformation that actively prepares our centre to evolve and adapt in the face of systemic pressures (Institute for the Future, 2020) brought on by a changing academic landscape. This process of adapting will also contribute to developing our institution's resiliency to withstand environmental disturbances and pursue emerging and budding opportunities to improve the experiences of our learning communities.

Change Implementation Plan

To restate what Chapters 1 and 2 have already evoked, a standard approach to strategic planning will not address the perpetual transformation currently experienced (Buller, 2014) in the CTL at Snow Island College and higher education in general. Considering the current climate of post-secondary education, Morrison et al. (2019) note that while we may be tempted to think that we need a complex strategy to help navigate our complex world, what we actually need is a simpler approach with robust principles that give rise to multiple possibilities and strategic shifts where necessary (Buller, 2014; Morrison et al. 2019).

Progression of this agenda necessitates a departure from more traditional and heavily siloed systems that restrict efforts or opportunities for cross-fertilization of ideas and cooperation among the various CTL departments. New types of academic programming, more flexible, low-cost, and accelerated learning pathways, and increased access to learning support, technologies, and materials are already painting an evocative picture of what the future of teaching and learning may look like for our

institution. As previously stated, this calls for a transition to an ecosystem that supports broad networks of diverse stakeholders while inviting new knowledge, viewpoints, innovation, and creativity to their collaborative work (Educause 2020; Setser & Morris, 2015).

Managing the Transition

Moving all ten CTL departments to one common location has certainly been conducive to our overarching goal of enabling multidisciplinary teams to work more effectively together. However, as the three-phased solution proposes, *unfreezing* (Lewin, 1997) will entail a general loosening of current systems, processes, and structures to give rise to a new adaptive order (Uhl-Bien & Arena, 2017) that is more relevant and responsive to our shifting circumstances. Acquiring this type of environment will require a willingness to work in conditions of uncertainty and the ability to explore novel ideas, articulate our desires for a future state, and then find tangible ways to pursue a path forward.

Lewin's (1997) three-step change model that was introduced in the previous chapter offers general steps for implementing organizational change while leaving space for additional information (Hussain, 2016) to address the functional significance of the CTL. Part of this includes accommodating a multi-layered approach to establishing a centre-wide atmosphere that enables innovation, teamwork, and cross-disciplinary collaboration. This strategic pathway begins by enacting networks and adaptive leadership tasks that function in alignment across all ten CTL departments. As stated in Chapter 2, creating *adaptive space* (Uhl-Bien & Arena, 2017) will be the focus of the un*freezing* and *change* stages of the Lewin (1997) change model. This will be exemplified as teams reorientate to create more favourable conditions for linking ideas, information, people, resources, and technology.

Figure 3 in Chapter 2 demonstrates how within this space, an integration of Setser and Morris's (2015) framework for building a culture of innovation in higher education and Nadler and Tushman's (1989) congruence model, will be used to help frame our understanding around the complex systems,

structures, and relational undertones that either enhance or inhibit cross-disciplinary participation, innovation, and creative problem-solving.

Morrison et al. (2019) emphasize that strategy in this context does not mean coming up with a perfect plan, or as they more accurately state, "becoming paralyzed with analysis" (p.106). Instead, they stress the importance of developing confidence in our ability to experience what we cannot perfectly comprehend. They further state that agile leadership involves both facts and intuition, meaning that we must develop dexterity in trusting our intuition while recognizing when we might be wrong. As stated in Chapter 1, this reflects what I strive to employ through adaptive and shared leadership approaches, which are bolstered by humility and principles of high openness and high trust (Schein & Schein 2018). Therefore, when various forces provoke my perceived notion of how things are or how they should be, I will need to be prepared to question my assumptions, change course when required, and make quick decisions. I will also need to guide others to temper planning while nudging those who need it.

More specifically I will need to enable others, such as our associate dean and our mid-level leadership team, to follow this example by instilling these same practices and principles within their teams and across the various departments that comprise the CTL's organizational structure. This leadership approach will include individuals, groups and the organization working in unison to explore and reset direction (McCauley & Van Velsor, 2003). As I've depicted in the following section, teams must work collaboratively to understand the technologies and drivers that enable adaptive responses to changing circumstances (Institute for the Future (IFTF), 2020) and establish practices around future-orientated decision-making. Already, our pandemic experience has illuminated our ability to adapt and evolve quickly and continually. In supporting the immediate transition to remote teaching and learning, we saw the emergence of a new paradigm that challenged existing notions about our natural inclination to resist change (Vyas, 2021). The experience also highlighted our inner agility and innovative abilities to seize large-scale academic and organizational transformation opportunities.

However, change and innovation are continuous processes. Providing a clear and open path to innovation necessitates the explicit directive from those of us in formal leadership positions to others on the team to experiment with new methods and approaches (Cooperrider & Whitney, 2005; Setser & Morris, 2015). This type of environment entails the freedom to take risks and foster new learning, even when it results in less than successful efforts or even total failure (Setser & Morris, 2015). Setser and Morris (2015) argue that to create this context, leaders need to actively work towards creating policies that promote and reward innovative behaviour and put an end to the policies, that create barriers for innovation.

Scenario Planning for the CTL

Caldicott (2014) maintains that the distinctive factor that separates leaders that are successful in driving innovation and collaboration from those that are not is their ability to understand complexity. They further reason that to set direction in this increasingly complex world, we need to develop skill sets in framing challenging concepts quickly, synthesizing data that gives rise to new insights, and cultivating teams that can generate future scenarios different from what they know today. While I explored many of the bigger picture developments and trends impacting the CTL and Snow Island College in Chapter 1, this section builds on an implementation process centred on the practice of strategic foresight and systems thinking across all CTL activities. This focus will help amplify organizational preparedness and resilience and act as a catalyst for further integrating foresight into practices to support innovation and sustainability in ongoing decision-making (IFTF, 2020).

As noted in Chapter 2, unlike standard approaches to strategic planning, unconventional methods based on the principles of foresight, such as scenario planning and establishing a strategic compass, are more in line with the culture of higher education (Buller, 2014). Scenario planning is a strategic process where decision-makers create narratives with many potential endings to evaluate and manage both positive and negative impacts (Ali & Luther, 2020; Konno et al., 2014; OECD, n.d.). With

CTL managers as participants and myself and the associate dean as facilitators of the process, crafting narratives would entail collectively formulating a clear set of assumptions and approaches to dealing with uncertainty. As Shoemaker (1995) points out, scenario planning can be applied to a variety of organizational issues as a routine method for "imagining possible futures" (p.25). Similarly, Setser and Morris (2015) claim that developing "habits of mind" (p.15) around these types of practices helps embed them into the culture of the organization more quickly.

Like scenario planning, setting a strategic compass uses an appreciative inquiry approach that extends beyond goals and objectives by integrating a strong vision, values, needs, talents, and growth prospects (Buller, 2015; Groff, 2021). According to Buller (2014), a strategic compass also provides a tactical way to direct attention to what we are already doing well so that we can do more of it. Both scenario planning and strategic compass models often focus on understanding system dynamics and are regarded as more effective in enabling learning, creativity, and adaptive capacity (Kezar & Holcombe, 2017).

Strategic Practice for Imagining Possible Futures

Given the enormous challenges currently facing Snow Island College, the goal for the CTL is to capture a range of possibilities while prompting mid-level leadership and other decision-makers to explore changes that we might otherwise overlook. Shoemaker (1995) notes that this type of strategizing compensates for two common oversights in decision-making – underpredicting and overpredicting change. As such, scenario planning will allow us to map a middle way between the two (Shoemaker, 1995) while providing "onramps" for leaders at all levels of our organization to engage in the work honestly and openly (Setser & Morris, 2015).

The Institute for the Future (IFTF) (2020) states that planning for potential future scenarios requires foresight to consider contexts beyond the organization itself. One example where scenario planning can allow the CTL to forecast the future of our programs and services is by leveraging what we

have learned during the pandemic and almost two years of working, teaching, and learning online. Despite the numerous constraints and factors beset by forces beyond our control, the events, trends, and technological developments that have emerged over the last two years have emphasized the need to speculate on how our centre's service models will fair over the long-term. Mapping options such as reverting to pre-pandemic practices, leveraging from post-pandemic opportunity and emergence, or becoming the catalysts for academic transformation (Horizon Report, 2021) can help us think critically about how our people, projects, tools, and value to the larger education ethos will evolve under various conditions.

Signals of Change

IFTF (2020) defines the trends that we see in our environment that have the potential to shape the future as *signals of change*. Signals can include data points or measurable changes in our external or internal environment, such as introducing a new technology or application, a story in the media, an influential report or research article, or even a personal observation (IFTF, 2019). Similarly, the OECD (n.d.) recommends regular horizon scanning and identifying which potential changes could be the most impactful or surprising. In the context of the CTL, these can prompt our teams to think about how these events or information can signal change and impact or influence future teaching and learning practices and support models.

Drawing from examples provided in recent Educause (2020, 2021) Horizon Reports, our mid-level leaders can engage CTL teams to detect signals and create story-like narratives around opportunities for growth, constraint, collapse, or transformation (Educause, 2020; Educause, 2021; IFTF, 2020; OECD, n.d.). For example, a *growth* scenario for certain services could be driven by signals of increased demand or a shift in learner needs or behaviour. Alternatively, indications of diminishing resources, lack of access, or financial strain may be the impetus for a *constraint* scenario. For some CTL departments, this may include a decrease in government grants, trends indicating a shrinking demand

for certain services, or lack of access to learning technologies. By contrast, a c*ollapse* scenario may portray the demise of some structures and services *coerced* by rapid growth or breakdowns in our external environment (Educause, 2020). Such instances may include the cost of living or tuition increases, lack of student funding support, or a downfall in the economy. Although both constraint or collapse scenarios may indicate a diminishing role (Educause, 2021) of some services, structures or practices, these contexts may also prompt other ideas and innovations to help fill in the gaps.

Finally, a *transformation* scenario could depict an environment where we establish new and successful models and practices that better align with the evolving narratives of our learning communities and external environment. For instance, we are already identifying some of the lasting impacts from the COVID-19 pandemic as potentially transformative for future teaching and learning practices and workplace models. One of the most significant impacts for the CTL is the more widely accepted notion of working and learning from anywhere. Thanks to the adoption of new learning technologies and communication platforms such as Zoom and Microsoft Teams, our leaders who manage and maintain academic support systems and services can reconceive how to connect with a broader and more diverse learning community and workforce on campus and from remote locations.

Within the same realm of scenario planning, Nadler and Tushman (1989) provide the theoretical notion of *frame-bending* to describe change resulting from the anticipation of external events that may necessitate large-scale change without a sharp break to the existing organizational structure. This approach accommodates a range of possibilities while keeping within the parameters of our organizational threshold. The challenge will be our ability to separate factors that we know for sure from those that are highly unpredictable (Morrison et al., 2019; Schoemaker, 1995). As outlined in the following section, the entire organization will need to be actively engaged in shaping these future contexts. Implementing these strategic practices will require both myself and the associate dean often sitting at the same table as mid-level leaders while enabling them to lead the implementation process.

The following sections will also provide more tangible examples of what enabling will look like in practice.

Stakeholder Responsibilities, Timelines, and Priorities

The *S-Curve model*, discussed in further detail in the following section, demonstrates that change is inevitable and ongoing despite some resistance. Therefore, doing things differently needs to become a perpetual way of thinking and working (Morrison et al.,2019). To sustain behavioural change in the CTL that fosters and promotes increased collaboration and innovation, people at all levels of our organization need to understand and assess existing functions, accept a way forward, and act as required (Cawsey et al., 2015). As emphasized throughout this OIP, this will require a change management process that elicits boundary-spanning partnerships, innovation, and more agile responses to current and future institutional needs. It will also require attention, focus, and commitment (Cooperrider & Whitney, 2005) from all CTL departments.

When change is proposed, establishing clarity around roles, responsibilities, and relationships will be essential to building channels of participation and fostering active engagement with all participants, particularly when it involves adapting traditional functions. Therefore, the three-phased solution will require mid-level leaders in collaboration with myself and our associate dean to take on the role of change leaders and facilitators in our change progression. This type of leadership will include demonstrating to others a willingness to unfreeze from past routines and patterns (Cawsey et al.,2016) that are no longer relevant to our current circumstances. It will also involve groups of people coming together, in some cases for the first time. Already we are seeing a need for increased partnerships that bring together learning experience designers, student accessibility experts, faculty developers, educational technologists, and librarians to support increased adoption of hybrid learning models, accelerated use of learning technologies, new faculty development structures, and initiatives that incorporate work-integrated learning into existing curriculum development models and processes.

A productive beginning in this context necessitates an environment structured around teamwork. Edmondson (2013) offers the concept of "teaming" as a methodology for getting teams to begin functioning effectively in situations that rely on interdependencies when addressing fast-moving challenges. They claim that the culture among these teams needs to place value on curiosity, passion, and empathy. As an underlying premise of social justice, giving voice to those who have not had a direct voice at a decision-making table will also be necessary. Establishing this environment requires leadership across our centre to promote and foster *psychological safety*, a concept touched on in the previous chapter, as a critical aspect of group cohesion. Edmondson (1999; 2012), who writes extensively on this topic, states that team psychological safety exists when members feel that their team is a safe space for interpersonal risk-taking.

This deliberate flattening of the hierarchy requires a conscious effort by the CTL mid-level leadership team, myself, our associate dean, and the various other task teams implicated in the implementation process to develop *teaming* guidelines and psychological safety structures and routines that enable team functionality and productivity right away (Edmondson, 2013; Morrison et al., 2019). Although there are several frameworks for psychological safety, Clark (2020) offers a simple four-step model based on the principles of inclusion, safety to learn, safety to contribute, and safety to challenge the status quo without fear of being punished or marginalized. In other words, team members need to feel that they are both accepted and respected when working with others in their collaborative work (Clark, 2020; Morrison et al., 2019).

Instigating Change through Human-Centred Innovation Processes

Within the same realm of psychological safety, other elements of social justice, including respect, care, recognition, and empathy (Theoharis, 2007), are relevant to the implementation of this OIP. Its success depends on a multi-layered leadership approach that promotes and fosters empathy and knowledge-seeking from all stakeholders (Lowery, 2019). Morrison et al. (2019) maintain that to ensure

good ideas bear possibility, all team members need to share the responsibility for implementation and be provided with a safe environment to conduct deep and focused conversations. They also convey that leadership can help guide these discussions by using strategies such as *equity of voice*, which ensures all members have the same amount of time to contribute their feedback, opinions, or ideas. Another strategy that can increase psychological safety and build trust among teams is the use of Liberating Structures by Lipmanowicz and McCandless (2013). These simple, easy-to-learn and adapt microstructures can be used to increase participation, strengthen relational coordination, and enhance trust. When used regularly, the various devices these authors provide in their methods toolkits are meant to help shift how people work together while focusing on inclusion and engagement strategies that contribute to group success.

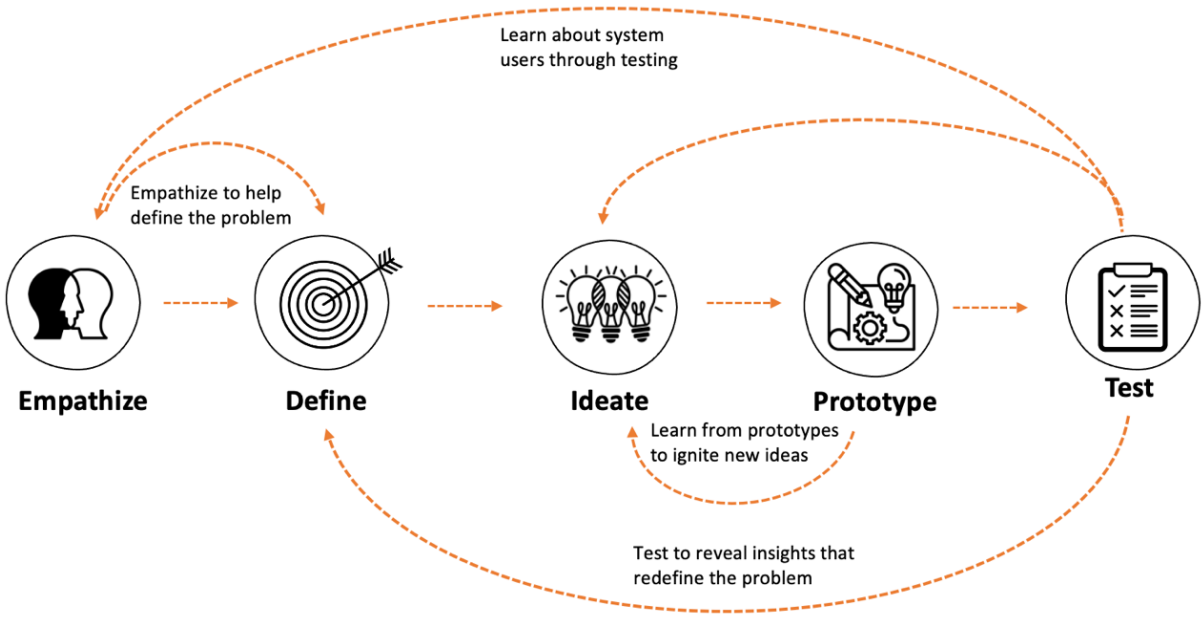
Both Morrison et al. (2019) and Lipmanowicz and McCandless (2013) promote the notion of how small changes in the way people function can produce significant differences in what they accomplish. Morrison et al. (2019) further elaborate on this concept by suggesting that leadership expectations for any individual member should be small while emphasizing that the accumulation of many modest commitments can add up to significant progress and momentum. I will provide more specific details in the final section of this chapter on how these methods will be used as simple communication and engagement tactics in the implementation process.

Design thinking, which has its roots in innovation management and psychological theories on creativity, visual thinking, and human values (Auernhammer & Roth 2021), will guide teams through the design and development of new structures and processes that will better meet the current and future needs of our learning communities. As noted in Chapter 2, this process is comparable to other inquiry cycles such as the *Plan, Do, Study, Act* model for its iterative phases and inductive and deductive qualities (Cleary, 2015; Reed & Card, 2015). It also bears similarities to *appreciative inquiry* for its focus on pursuing opportunities rather than exclusively on problem analysis (Buyarski,2021).

Relevant to the notion of adaptive space for its virtues of creation and linking up of novel ideas, innovation, and learning (Uhl-Bien & Arena, 2017), the design thinking process, as depicted in Figure 8, is also helpful for challenging our assumptions, redefining problems, and coming up with innovative and practical solutions through exploration, prototyping, and testing (Dam & Siang, 2020). IFTF (2020) describes design thinking as the "democratization of human-centred design methods for the creation of new products, services, and initiatives" (p.7). As a process already familiar to many CTL teams, it will help promote organizational learning and innovative thinking and behaviour in the unfreezing and change stages of the implementation process. However, providing on-ramps for those less familiar with these processes will be essential.

Figure 8

Design Thinking in Adaptive Space



Note: Figure 8 is an adaptation of a design thinking visual created by the Interaction Design Foundation (2021). The visual is inspired by the five-step design thinking process proposed by the Stanford University d. School (n.d).

Although variations of the design thinking process exist, it typically has five stages, as shown in Figure 8. These include *empathy, define, ideate*, *prototype*, and *test* (Dam & Siang, 2020; Stanford University d. School, n.d; Tanulas & Fuzetek, 2019). The basic premise of design thinking is that by starting with an empathy focus, we can better understand human needs while deferring judgement and creating a space that maximizes the potential for ideas and diverse points of view to surface (Dam & Siang, 2021). Design thinking methodologies also serve as valuable mechanisms to gather ongoing input and feedback from stakeholders during the change and implementation process. These have been included in the overarching implementation framework in Appendix B and will be explored in further detail in the Communication section of this OIP.

Pioneers, Pragmatists, and Soreheads

According to Morrison et al. (2019), common to most change efforts, there are three types of people: those leading the change (the pioneers), those that will go along with change if their time and reputation are not wasted (the pragmatists), and those that have no desire or will to join in (the soreheads). They claim that among these groups, the pragmatists are typically the largest group, and the pioneers and soreheads, while sitting on opposite ends of the spectrum from each other, are usually fewer in numbers. Although individuals within the mid-level leadership group would generally be characterized as *pioneers* or *pragmatists*, mobilizing others to accept change can be challenging for some members, particularly with teams and groups less accustomed to working in uncertain circumstances. Darfler-Sweeney (2018) suggests that the most effective strategy when implementing change is never to confront the "naysayers". He claims that this will only push them further in the opposite direction of the outcome we hope to achieve. Instead, he suggests the focus should be on the middle group (the pragmatists), beginning with those who are more inclined to support change efforts, even if their contributions are more cautiously employed.

Although Darfler-Sweeney (2018) uses different terminology than Morrison et al. (2019) to describe each group, the overarching principle remains. Every network we build will draw in people with new physical assets, skills and knowledge, and social capital that can help move towards a particular outcome (Morrison et al., 2019). This includes the pragmatists, who, under the right conditions, may even develop enough trust to bestow new perspectives while benefitting from the experience of working with diverse teams to grow their own adaptive capacity.

One consideration posited by Tierney and Lanford (2016) is that to support meaningful engagement and a growth mindset around innovation, we should focus more on methods that promote intrinsic motivation instead of extrinsic motivation. According to their logic, incentivizing performance through extrinsic measures such as financial promotions or professional advancement generally leads to a decline in engagement once the objective has been met and often prematurely. Instead, they suggest focusing on intrinsic motivators such as autonomy, creative inquiry, and innovative discovery. Although engagement is a process throughout the implementation of this OIP, I will provide more practical examples of meaningful engagement tactics in the communication section.

As we determine which tasks to prioritize and how to track our progress (Setser & Morris, 2015), we will need to balance two dimensions: guidance and participation (Morrison et al., 2019). For the CTL, this involves the interplay between myself and our associate dean, mid-level leaders and the innovation task teams that encompass boundary-spanning partnerships among the various CTL departments. We will also need to engage other departments from across the institution who will be implicated directly or indirectly by the changes and decisions made. Their voices will be an important variable at different stages of exploration and decision-making. Different individuals and groups will enable others and exert influence during different times in the implementation progression. Therefore, shared leadership will need to consistently emerge as a critical factor in our ability to learn, innovate and perform (Kezar & Holcombe, 2017).

Empowering others in this context involves seeing their ability to grow and evolve; or as Frei and Morriss (2020) allege, for leaders to unleash the potential in others, we need to imagine a better version of who they can be. Therefore, developing a comprehensive engagement framework that encourages broader teamwork structures and new forms of interaction and decision-making (Smith, 2015) will be critical to establishing meaningful contributions from all levels of the organization. Appendix A exemplifies an engagement framework that has been used successfully by specific CTL teams who are already accustomed to working within broader networks across the institution. One element from this framework relevant to implementation planning is the engagement spectrum which includes five levels of stakeholder participation. The framework was adapted from a model initially developed by the Learning Experience Design team of the CTL and inspired by the work of the International Association of Public Participation (IAP2).

Table 1

CTL Engagement Spectrum

Empower	Collaborate	Involve	Consult	Inform
GOAL: To empower stakeholders to fully make the decisions. **PROMISE:** We will abide by the decisions you make.	**GOAL**: To partner with stakeholders to analyze issues, develop alternatives, make recommendation, and determine the best solution for a decision. **PROMISE:** We will partner directly with you throughout the project and decision-making process. We will create joint solutions or recommendations.	**GOAL:** To work and understand the viewpoints and concerns of the stakeholders through working directly with them. **PROMISE:** We will work directly with you to ensure your viewpoints and concerns are reflected in the decisions made.	**GOAL:** To get feedback from stakeholders at various points in the project or before decisions are made to ensure that issues and concerns are understood and considered. **PROMISE:** We will consult with you to ensure your viewpoint is heard and considered when making decisions. We will communicate how this input and feedback influenced the decisions made.	**GOAL:** To create a shared understanding of the project and any decisions made through information and communication. **PROMISE:** We will keep you informed about the project and the decisions that are made.

Note. The engagement spectrum was derived from the CTL engagement framework, which was informed by principles established by the *International Association of Public Participation* (2022). The framework is already part of an existing practice for some CTL teams.

Each level within the spectrum clearly outlines the various goals and promises to stakeholders during the engagement process. The CTL version of this engagement spectrum, as illustrated in Table 1, includes *empower*, *collaborate, involve, consult*, and *inform*. Stakeholder engagement is also reinforced by Setser and Morris (2015) as a condition for creating a culture of innovation. They highlight the importance of engaging stakeholders as often and authentically as possible in ways that promote innovative and collaborative processes without making the work unmanageable.

Short, Medium, and Long-Term Goals

The following goals have been established to summarize this section's predominant focus and set the general direction for the implementation plan. Appendix B includes additional information such as an estimated timeline and more detailed connections to the theoretical concepts, strategic devices, and communication mechanisms that will be employed as part of the overarching implementation framework.

Goal 1: Foster Strategic Thinking and Awareness about Potential Impacts and Opportunities for the Three Proposed Solutions

As depicted in the timeline of Appendix B, the first eight months of the implementation process will involve transitioning through a state of unfreezing. During this timeframe, scenario planning will help us identify trends and uncertainties in our internal and external environment. The goal will be to develop a shared framework that fosters strategic thinking among mid-level leaders and encourages diverse perspectives and astute awareness about external impacts and opportunities (Shoemaker, 1995). Nadler and Tushman (1989) claim that effective reorientations are characterized by *diagnosis thinking* that involves taking time to understand the impending environmental challenges and forces signalling change to our current context. As indicated in Chapter 1, for the CTL, signals of change could be characterized as technical, political, economic, societal, or otherwise. The themes that emerge from continuously scanning the landscape and developing habits around constructing a series of possibilities

will also provide boundaries for future work and help compensate for uncertainties in our shared decision-making (Shoemaker, 1995).

The success of this goal would be for the CTL mid-level leaders to employ anticipatory thinking and foresight to detect changes in our environment, respond to challenges and opportunities and adapt and evolve to better align with our shifting circumstances (IFTF, 2020). Ongoing analysis will be required to assess how various systems connect and work in concert across the CTL and within the broader institution. In reference to Nadler and Tushman's (1989) *diagnosis thinking* concept, Cawsey et al. (2016) claim that how we diagnose the organization will change over time as we experience different concerns and objectives.

Goal 2: Improve Conditions for innovation and Cross-Disciplinary Collaboration

The data we collect during scenario planning and various inquiry cycles will also inform the CTL's new organizational architecture (Nadler & Tushman,1989). More specifically, it will allow us to rethink and reshape the technical processes and social structures that support innovation and collaboration while maintaining and regaining congruence within the broader system. This includes having systems in place for regular diagnosis thinking (Nadler & Tushman, 1989) and ongoing communication. It also involves the deliberate design and development of informal and formal structures to support the emergence of new ideas and ongoing modifications of processes and practices (Setser & Morris, 2015).

Processes built on respect, care, recognition, and empathy (Theoharis, 2007) will be crucial to establishing an environment that is both safe and inclusive. As Shields (2020) emphasizes, the diversity of people and their ideas coming together can be our strength if we allow all people to be treated with respect and provide all voices equal opportunity to be heard.

Goal 3: Innovate Toward Radically Better Solutions

As initially stated in Chapter 1 and then further emphasized throughout Chapters 2 and 3, the long-term vision for this OIP is for multidisciplinary teams to work more effectively together while

bringing new knowledge, viewpoints, innovation, and creativity to their collective work. Therefore, in keeping within the boundaries of my immediate scope of influence, the long-term goal for reaching this vision will be to motivate and enable CTL mid-level leaders to create routines and habits around tackling real organizational challenges and formulating incremental solutions that can lead to more immense and impactful breakthroughs. The action, reflection engagement process (Van Velsor, 2016) derived from solution two will assist in their development by equipping them with tools and methodologies that prompt reflection, knowledge exchange and mobilization, and organizational learning.

The biggest challenge in this development will be our ability to generate adaptive capacity across the entire mid-level leadership group, particularly those who are more pragmatic when faced with uncertainty or lead teams who have historically demonstrated resistance to change in previous circumstances. As outlined in solution one, Setser and Morris's (2015) self-assessment tool will provide on-ramps for these leaders and their teams to determine where they are at on the continuum of building an adaptive culture of innovation and collaboration. An analysis of the results will also provide a basis for engaging with myself, the associate dean, and their mid-level leadership peers to collectively determine where individuals across the leadership team have similar or competing priorities or levels of understanding of what conditions are necessary for cross-disciplinary collaboration and innovation to exist across our centre.

During our transition, it will be necessary to focus on incremental tasks that both teams and individuals can accomplish to improve our current system while concurrently building conditions for a new system to emerge (Setser & Morris, 2015). When the concepts of *sensemaking* and *organizational learning* are linked to the notion that small changes can lead to significant impact, properly leveraged incremental solutions can, in turn, have a dramatic impact on the overall progression of the change process (Morgan & Zohar, 1998), particularly when you consider the ripple effect one initiative can have

on others that follow. In this regard, efforts to cultivate an innovation culture across the CTL will exist within the broader context of transition (Setser & Morris, 2015).

Change Process, Monitoring, and Evaluating

In this section, I begin with a conceptualization of a change process that incorporates Lewin's (1997) three-step change model, the notion of *adaptive space* (Uhl-Bien & Arena, 2017) and elements derived from seminal and relevant contributions to the literature on monitoring and evaluation. As illustrated in Figure 9, I will also use an "S-curve" analogy, rooted in Handy's (1995) *sigmoid curve* model, to highlight the patterns of organizational change and evolution.

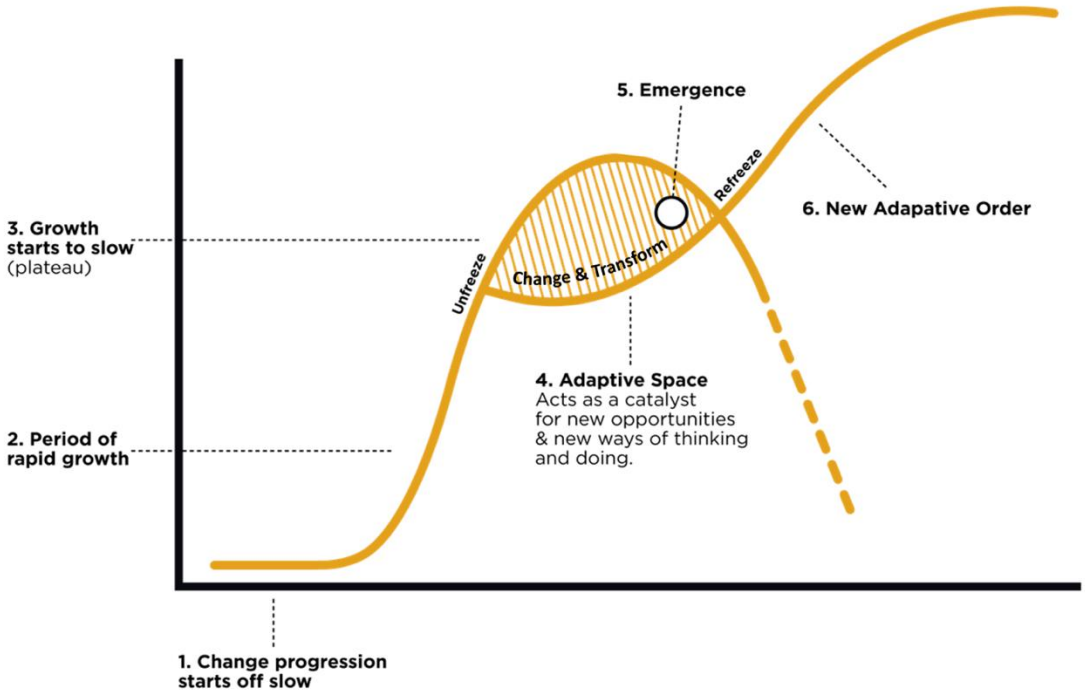
S-Curve frameworks are commonly used in various disciplines to illustrate the story of a product or an initiative's life cycle. It can also portray the rise and fall of an organization or corporation (Collins, 2009). The overarching premise of the S-curve is that there is always life beyond the current state (Nadler & Tushman, 1997), and "nothing lasts forever under its initial momentum" (Morrison et al., 2019, p. 16). Equally as compelling and relevant is Wheatley's (2006) perception of an ecosystem, which highlights the notion that anything disruptive to the current system can also play an integral part in helping it self-organize into its new form of order. Therefore, as the surrounding environment evolves and circumstances shift, these forces can start to influence the system's current state of congruence (Nadler & Tushman, 1989). The system then decides whether to reject or accept it. If it accepts it, the new information will enter the network and begin to grow and transform into a higher level of complexity or something entirely new (Wheatley, 2006). Nadler and Tushman (1997) claim that for leadership, reshaping and rethinking the fabric of our organization, both the technical processes and its social relationships, is the essence of sustaining a robust organizational architecture.

As Figure 9 demonstrates, change initiatives often start slow. This gradual progression is followed by a period of rapid growth, which eventually reaches a plateau. In Collins's (2009) version of the S-curve, he describes the growth phase as the stage of "denial of risk and peril" (p.21), indicating

that as organizations progress, certain warning signs will eventually start to surface, even if things may appear to be going well. Similarly, Nadler and Tushman (1997) maintain that periods of progression and growth are often disrupted by periods of upheaval or disequilibrium. In the complexity literature, these can also be compared to "dissipative structures", a theoretical concept that originated in thermodynamics research to define a process where energy gradually increases or diminishes creating irregular and unpredictable patterns and disturbance (Goldstein, 2018; McKelvey, 2018; Wheatley, 2006). Therefore, a series of adaptations and corrections may require breaking away from a current pattern of congruence for a new one to emerge (Nadler & Tushman, 1989).

Figure 9

S-Curve Change Progression



Note. Figure 9 represents a theoretical compilation of concepts derived from the literature on complexity leadership and evolutionary strategic management practices. It also portrays the significance of adaptive space and organizational congruence in change progression (Collins, 2009; Lewin, 1997; Morrison et al., 2019; Nadler & Tushman, 1997; Uhl-Bien & Arena, 2017, 2018).

Handy (1995) claims that the secret to growth and sustainability is to start a second curve when there is still enough time, resources, and energy to explore new opportunities. In other words, the process should begin before the first curve starts to plummet downwards. Morrison et al. (2018) add that our strategic approach needs to consider which resources and learnings we can take from our past and current successes (e.g. technology, skills, people) that can be repurposed for success under new and different circumstances.

For the CTL, managing this reorientation will involve determining which factors will need to change to enable CTL departments to respond effectively to our continuously evolving circumstances. Drawing again from the complexity literature, this ties to the concept of creating *adaptive space* for its focus on exploring, testing, and prototyping new opportunities. As noted in the previous section, these qualities are also inherent to the design thinking process. Returning to the S-curve analogy in Figure 9, the period before reaching the plateau could also equate to the unfreeze stage of the Lewin (1997) three-step change model, which is the pivotal phase for loosening current structures, processes, and systems to move towards a redesign or reorientation that deviates from our current state.

Nadler and Tushman (1989) propose that one of the fundamental principles for organizational reorientation stems from the concept of *diagnosis thinking*, which involves collecting, integrating, and analyzing data about the organization and its environment. The implementation phase of this OIP will initially involve mid-level leadership, myself, and our associate dean working collectively to scan the environment for signals of change that may indicate threats or opportunities (IFTF, 2020). These signals could include changes in demand for our services, advances in certain technologies, conditions attributed to our new work environment, or changes in available resources. In alignment with scenario planning, discussed in the previous section, IFTF (2020) claims that to build a future-ready organization, we need to detect, respond, and evolve. This includes:

- scanning the horizon,

- expanding points of view,
- creating space to explore and prepare
- contributing to the systems we depend on (p. 8)

We will also need to consider the impact on people individually and collectively (Nadler & Tushman, 1997). Monitoring the organizational culture, including people's motivation, commitment, and social relationships, will inform how we develop structures and processes that enable adaptive capacity, innovation, creative problem-solving, and multi-disciplinary collaboration.

At a macro level, our transition from independent services to a centralized model where all services are interconnected and operating out of a shared location demonstrates this shift from one change life cycle to the next. This more extensive transformation will have created waves of opportunities for micro-level changes across the organization that could be monitored and tracked using the same S-curve analogy. Examples include shifting from manual to automated processes, such as using a self-service model in the library or student scheduling software to book appointments with academic strategists or peer-tutors. Others include processes and structures that support the emergence of teaching and learning services and initiatives. These latter examples entail supporting the evolution of blended and hybrid course design; tracking learning analytics to inform learning experience design and program development, creating open educational resources; and employing immersive learning technologies to engage more diverse learning needs (Educause, 2020, 2021). Although these examples are somewhat speculative, they are consistently profiled as key trends, challenges, or developments (Horizon Report, 2019) in the educational technology literature, which falls within the purview of the CTL portfolio.

Tools Monitoring and Evaluation

Returning to the S-curve analogy that was introduced in the previous section, when a change initiative is in its growth stage, collecting actionable data that encompasses both qualitative and

quantitative measures, such as feedback from students, faculty, CTL staff, the mid-level leaders, and other stakeholders that are impacted will be essential to tracking implementation progress and taking corrective action when necessary (Markiewicz & Patrick, 2016). With a focus on creating a culture of innovation across all ten departments, Setser and Morris (2015) provide a self-assessment tool encompassing seven factors. Each can be routinely monitored to help our leadership team collectively assess where we are at on the continuum of *catalyzing*, *enabling,* and *sustaining* an innovation culture across our centre (Setser & Morris, 2015, p.9). As referenced in Figure 3 from Chapter 2, these factors include communication, leadership, resources allocation, capacity, structures and processes, policy environment, and the learning agenda.

Routine monitoring will prompt a cautionary scanning for warning signs and help check our pre-conceived assumptions around what is appropriate, effective, efficient (Markiewicz & Patrick, 2016), and sustainable about the new centralized service model we are building. It will also help highlight some of the positive attributes and achievements that can be leveraged for crafting our narrative around future scenarios. Mento et al. (2002) claim that a monitoring system for assessing progress involves

- creating and implementing specific metrics to assess success,
- charting progress, and
- using a "small win" strategy to motivate and sustain the change effort.

Markiewicz and Patrick (2016) add that the monitoring system may entail the development of a central information hub that coordinates with our department units using a web-based interface. Snow Island College enterprise systems such as Microsoft Teams and Sharepoint can help in this process by providing secure platforms for storing data and creating information flows and structures for developing and sharing reports. Markiewicz and Patrick (2016) also propose a framework that begins with developing an evaluation question. This is exemplified in Table 2, which incorporates the three goals

stemming from the three-phased solution proposed in Chapter 2. The framework is inspired by Markiewicz and Patrick's (2016) monitoring plan.

Table 2

CTL Monitoring Framework

Evaluation Questions	Focus of Monitoring	Indicators	Monitoring Data Sources	Who is responsible and when?
Appropriateness **To what extent do CTLI systems structures, and practices support connection, organizational learning, adaptability, and future viability in accordance with their environment?**	Current system capabilities and new organizational competencies.	Performance of systems, structures, processes for their ability allow for ongoing adaptability, innovation, and interdisciplinary collaboration.	System analysis using Setser & Morris' (2015) Score Card and Rubric	CTL Staff (Collaborators) Mid-Level Leadership team (Empowered) Dean & Associate Dean (Facilitators & Enablers) To occur during plenary sessions as outlined in the proposed solution.
Effectiveness **To what extent do CTL mid-level leaders employ a systematic view around strategic thinking and awareness about potential impacts and opportunities?**	Changes in our collective understanding of environmental forces and complex issues facing the institution as well as the various possibilities and opportunities that could be used to address them.	Differences in how each department and how our centre, maintain and regain congruence. Critical success factors related to effective anticipation of changes that are unique to our CTL conditions.	Themes derived from regular intervals of diagnosis thinking (Nadler & Tushman, 1989).	CTL Staff (Collaborators) Mid-Level Leadership team (Empowered) Dean & Associate Dean (Facilitators & Enablers) Initiated during plenary sessions and re-enforced at regular touchpoints throughout the year.
Efficiency **To what extent has our investment (time, cost, energy) in developing new or improved systems, structures and practices increased our overall capacity and efficiency for executing on ideas and converting them into productive outcomes?**	Return on investment (input vs output) Changes in centre's ability to accommodate innovative and adaptive responses to complex and time sensitive challenges.	The difference in our centre's adaptive capacity to take on complex challenges Changes in how others perceive our value to the institution (value proposition)	Service and data analytics Satisfaction surveys Institutional resource allocation	CTL Staff (involved) Mid-Level Leadership team (Collaborators) Dean & Associate Dean (Facilitators & Empowered) Senior Executive (Enabler) Aggressive mid-year and end-of-year milestones are set during plenary sessions with each mid-level leaders to ensure tangible progress is made.
Impact **To what extent do mid-level leaders support innovation by encouraging experimentation and removing barriers for**	Trends in engagement levels (energy, enthusiasm, and support) for emerging initiatives.	The difference in how mid-level leadership shares available knowledge and learnings with each other and across the organization through multiple channels.	Environmental scans Mapping of current context – SOAR analysis results (strengths, opportunities,	CTL Staff (Collaborators) Mid-Level Leadership team (Empowered) Dean & Associate Dean (Facilitators & Enablers). Initiated during plenary sessions and managed

cross disciplinary collaboration?		The difference in whether social networks expand, group boundaries become more permeable, organizational learning moves beyond groups who participated to others in the organization.	aspirations, results) Results from Setser & Morris (2015) score card & rubric	over time throughout the year.
Sustainability **Was there evidence of benefits in supporting continual reinforcement and commitment to using innovative and collaborative processes and practices consistently across the CTL?**	Stakeholder satisfaction	The difference in how innovation and collaboration are framed over time within the CTL organizational life cycle (S-curve)	Mapping innovation outputs through the lens of past, present, and future experiences and scenarios.	CTL Staff (Collaborators) Mid-Level Leadership team (Empowered) Dean & Associate Dean (Facilitators & Enablers). Initiated during plenary sessions and re-enforced at regular touchpoints throughout the year.

Note. The above table was inspired by the *Monitoring Plan* by Markiewicz and Patrick (2016). However, due to the nature of the proposed solution, the target column has been removed. It will more appropriately be assessed against performance indicators and qualitative evaluation approaches. Though, as innovations are shaped, "targets" will eventually need to be defined to create action plans, a concept discussed in more detail in the following section.

Plan to Communicate the Need for Change and Change Processes

According to Deszca et al. (2020), a well-designed communication plan will help minimize the effects of misinformation and confusion that can become pervasive if the reasons for change are not clear to all employees. Our recent transition to a shared space has and will continue to impact existing roles, processes, and practices. Under the right circumstances, our new environment can be more conducive to cross-disciplinary collaboration and creative problem-solving when facing complex institutional challenges. However, as Nadler and Tushman (1989) point out, the dynamics of managing a long-term transition are unique compared to managing smaller changes with distinct starting and ending points. To enact long-term change in the CTL, we must establish routines around communication

patterns and processes (Setser & Morris, 2015). These structures will help our leadership team build adaptive capacity for managing a reorientation that will involve frequently breaking away from current patterns of congruence (Nadler & Tushman, 1989).

To gain enthusiasm and commitment for increased collaboration and more innovative approaches to solving institutional challenges, a shared understanding of the need for change will have to be established. The communication strategy described in this section draws from, Deszca et al.'s (2020) four-phased approach and Clarke's (2013) *Complexity Leadership Development* framework, introduced in the previous chapter. This integrated approach will also provide concrete, tangible criteria and guiding principles for our leadership team to effectively implement a change program that increases networks, collaboration and innovative problem-solving. The primary purpose of the communication plan is to enable mid-level leaders to infuse consistent messaging while keeping all stakeholders informed about change processes and progression. Beginning with Deszca et al.'s (2020) framework, the communication plan will incorporate the following four phases:

- pre-change approval,
- developing the need for change,
- mid-stream change and milestone communication,
- confirming and celebrating the change success

For the CTL, the *pre-change approval* phase occurred before our centre's move to the new centralized location. It entailed endorsement from our senior executive leadership team and the other institutional deans and directors whose centres are beneficiaries of the services we provide. Although this group consists primarily of academic centres, endorsement from leadership in non-academic centres and departments was also necessary. For example, Facilities, IT, and Financial Services each played a part in enabling our transition by either assisting with financial processes, managing Trades

(engineers, construction, electricians) during the renovation or ensuring we had the adequate technological infrastructure to operate.

Subsequent changes following our initial transition will generally be smaller in scope but have the potential for a broader impact on systems, structures and processes that exist across and beyond our centre boundaries. Engaging our senior leaders throughout the process will be critical as the changes, big or small, affect other systems and structures across the institution. In keeping with Lewin's (1997) three-step change model*,* Deszca et al.'s (2020) second phase, *developing a need for change,* will occur anytime environmental forces push existing practices into a state of unfreezing. This phase is also supported by data and information collected through the inquiry process within the *empathy* and *define* stages of the design thinking process and within adaptive space. Figure 10 illustrates this transition by building off the S-curve change analogy introduced in the previous section.

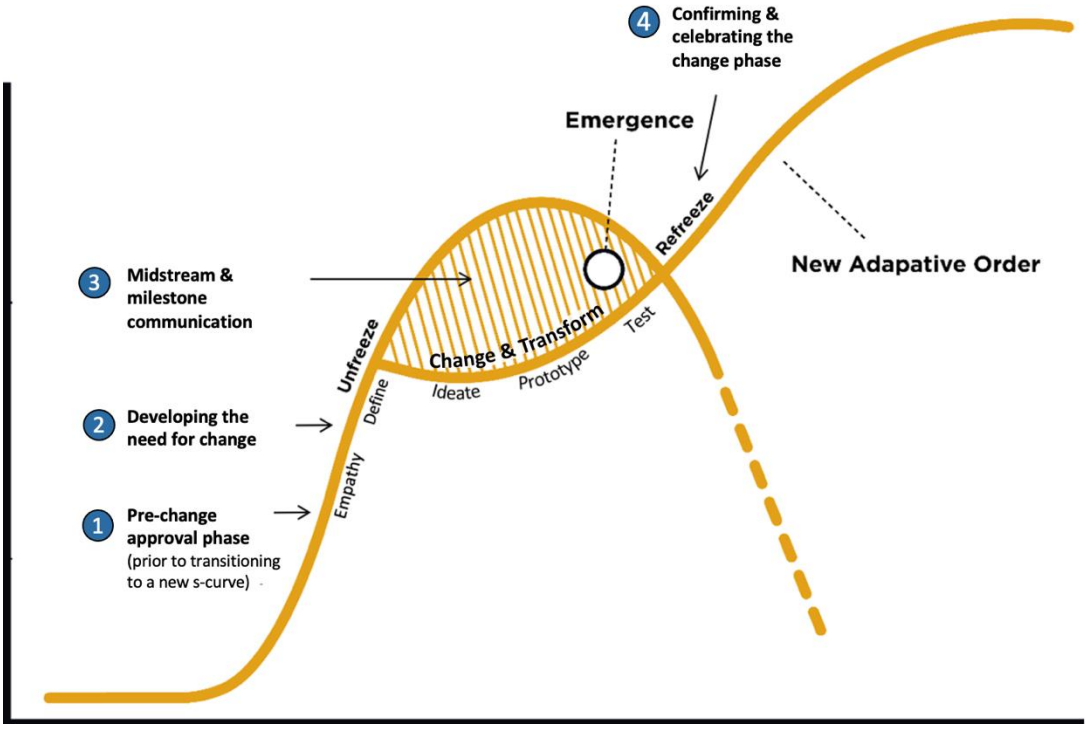
The midstream change and milestone communication phase will occur as change unfolds within *adaptive space* and innovation task teams progress towards a new adaptive order. In this phase, the design and development of new processes, procedures, and structures that are more favourable to collaboration, knowledge sharing, and agile responses to shifting environmental circumstances will also occur. To highlight once again Wheatley's (2006) analogy of living systems from Chapter 1, Deszca et al.'s (2020) third phase of communication addresses people's desire to know how the change will impact their purpose within the larger sphere of the organization. As different changes progress throughout the system, mid-level leaders must monitor progress and gather feedback on how the various groups accept new roles, structures, and procedures (Deszca et al., 2020). Prototyping and testing with impacted stakeholder groups will help in this regard. However, before this, additional communication measures and engagement methods will be necessary to encourage participation in the ideation stage. As people from all levels of the organization get involved, and shared leadership structures begin to form, leaders

must continually reinforce clear and consistent processes so that team members can start to develop habits and routines for innovative behaviour (Setser & Morris, 2015).

Deszca et al.'s (2020) final phase, *confirming and celebrating the change process,* involves communicating and celebrating the various successes of the change initiative. They suggest that celebrating success should be done at multiple points throughout the change process to keep up the momentum and reinforce commitment. This final phase should also include a discussion around lessons learned. Throughout the change process, both successful attempts and "failures" should be shared openly and be recognized as an essential part of innovation (Setser & Morris, 2015) and growth.

Figure 10

Timing and Communication



Note. Figure 10 incorporates Deszca et al.'s (2020) timing and communication phases into the change process as defined in previous chapters using key concepts from *complexity leadership theory*, *design*

thinking and the *Sigmoid Curve* model (Deszca et al., 2020; Handy, 1995; Hasso Plattner Institute of Design at Stanford University, 2022; Uhl-Bien & Arena, 2017, 2018).

While Deszca et al.'s (2020) four-phased approach is more prescriptive, Clarke's (2013) model calls attention to the systemic leadership behaviours and capacities the mid-level leadership team requires to support complex projects that entail high levels of team cohesion, communication, and engagement. Integrating both Deszca et al. and Clarke's approaches addresses communication within the process as well as the process of change within the realm of mid-level leadership development. According to Clarke (2013), specific leadership behaviours and capacities can be summarized into the categories outlined in the following sections.

Supporting Autocatalysis

CTL mid-level leaders organize our work environments through facilitated interactions and establish ensembles (Clarke, 2013; Uhl-Bien et al., 2007). Together with the mid-level leadership collective, the associate dean and I create soft structures (Setser & Morris, 2015) and techniques to facilitate the congruence of systems, processes, and people (Nadler & Tushman, 1989). These include action plans (Deszca et al., 2020; Morrison et al., 2019), delegation, empowerment, and autonomy to team members (Clarke, 2013). Concerning participation, a second tool that mid-level leaders and the task teams will employ is the CTL's Engagement Framework, which was introduced in the previous section. The engagement framework is already familiar to some departments; however, routines will need to be established to embed strong communication and engagement procedures into the broader CTL practices. The complete engagement framework has been included as Appendix A.

Supporting Shared Leadership

Supporting the spread of leadership across the centre will require coordination, guidance, and coaching (Clarke, 2013). The CTL leadership team will achieve this through methods that facilitate

interaction between system members while championing adaptive behaviours, such as risk-taking and exploring new approaches (Clarke, 2013; Kezar & Holcombe, 2014; Setser & Morris, 2015)).

Developing the System's Network

Kezar and Holcombe (2017) argue that organizational members cannot cultivate collaborative partnerships if the environmental conditions do not promote the sustainable growth of these relationships. Therefore, as outlined in solution two, mid-level leaders will require skill development in effectively building conditions for networks to take shape. This includes encouraging contact and interactions (Clarke, 2014) between individuals and groups from different departments when addressing complex system challenges.

Supporting Shared Meaning-Making

Channels and pathways will need to be developed across the centre to support conversations around our gains, our key learnings, and what has yet to be learned (Setser and Morris, 2015). Clarke (2013) maintains that to create favourable network conditions to support these interactions, leaders need to engage in *sense-giving* to foster shared understanding and resolve conflict or tension within the network(s). They claim that part of this includes developing a shared vision to guide network ensembles toward creative solutions to their challenges.

Identifying Barriers to Information Flows

According to Plowman and Duchon (2008), the power of capability within a system is maximized when information can flow freely through the system, as the system tries to make sense of it. As mid-level leaders conduct the system analysis as part of solution one, they will need to examine obstructions to information flows and knowledge distribution exchange within the social system (Clarke, 2013). This necessitates thinking about how the various sub-systems interconnect within our broader organizational environment (Clarke, 2014; Senge et al., 2008).

Fostering the Value of Tension

Uhl-Bien and Arena (2017) suggest that diversity and heterogeneity are critical to establishing adaptive space, pointing out that if all members brought the same perspective, rich interconnectivity would not be possible. According to their logic, this would result in a lack of conflict, which is necessary to generate tension to prompt adaptation or change. CTL mid-level leaders will need to create opportunities through structures and processes that invite conflicting views, perspectives, and needs while equipping teams with tools and methods to help resolve conflicts and differences respectfully. Kezar and Holcombe (2013) claim that effective teams recognize that tension can be integral to cognitively diverse groups, and therefore leadership needs to voice their appreciation for different perspectives and viewpoints. They also point to the importance of modelling this behaviour in their own interactions with others.

Building Social Capital

Clark's (2013) final area for development addresses the importance of the leader's role in fostering relational skills and behaviours that promote social ties. Again, part of this involves identifying barriers to information flows that impact practical shared leadership qualities in team dynamics. It also means taking measures to help improve the way people interact, engage, and cooperate (Claridge, 2014).

Tools for Communicating and Engaging Stakeholders in the Change Process

Starting a change initiative does not necessarily require a detailed project plan with milestones. However, it does necessitate a logical path to follow with several guideposts to set the general direction (Morrison et al., 2019). As noted throughout this final chapter, the CTL mid-level leaders as change drivers will require skills in "creating, anticipating, encouraging, engaging others, and responding positively to change." (Cawsey et al., 2016, p.15). Communicating the desired results of the various change initiatives will also be essential. Those in leadership roles, formal or otherwise, can accomplish this by creating a compelling vision (or strategic compass) for what the intended outcome might look

like once it is successfully implemented. Morrison et al. (2019) also recommend developing *action plans* to help outline the various tasks that need to be accomplished and help members of the group take responsibility for what needs to be done to move ideas forward.

The CTL Learning Experience Design Team (LXD), often responsible for leading large institutional projects associated with program quality assurance and course development, has already developed their version of an action plan framework called the Project Blueprint (see Appendix C). The framework incorporates the engagement principles discussed in the previous section. It also provides a structure for team members to set direction, track progress, engage others, and identify the knowledge and skill sets required to tackle their collaborative work. Although the LXD team is the only team within the CTL currently employing this model, it could easily be adapted to serve the needs of other CTL teams and interdisciplinary groups working on collaborative tasks across the centre. At the heart of this plan is a structure to unite a dynamic network of people and strands of activities that lead to systematically cultivating and coordinating efforts and commitments (Sull & Spinosa, 2007).

Morrison et al. (2019) maintain that shared action plans can help mobilize groups into action immediately by creating a shared understanding of what needs to be undertaken by group members and ensuring that each person understands their role in shared leadership toward a common objective. A combination of design thinking and appreciative inquiry methods will help facilitate multi-disciplinary interchanges of thought and knowledge building around acts of reflection, dialogue, inquiry, and diversity (Schwandt, 2008). More specifically, a design thinking approach using "how might we" questions will help guide teams toward solutions, while appreciative inquiry will promote strengths rather than deficits (Markiewicz and Patrick, 2016).

Of relevance to goal number two from the overarching implementation framework, teams working in this capacity will eventually become effective at reading the landscape, detecting signals and establishing a variety of narratives (scenarios) that tell how different factors or elements might interact

under certain conditions. Once they formalize these relationships, the next step will be to sort through the various options to identify those with the most potential for success. Modelling action plans with the mid-level leadership team will be essential to implementing action planning more broadly, such as with the *innovative task teams*, as proposed in solution three.

To help identify which action items need to take priority, Morrison et al. (2019) recommend the *2X2 matrix model (*also known as the *Lean Prioritization Matrix)*. As seen in Figure 11, its focus on impact and ease of implementation provides a simple way for teams to choose among different options and make decisions and choices around opportunities that make the most sense. They also recommend looking for what they have dubbed as "the Big Easy," a tactic that involves finding the practical steps to moving toward an opportunity. They claim that in the initial stages of change, choosing tasks that are too difficult can be overwhelming and lead to discouragement. Conversely, selecting easy options with little consequence can also demotivate future engagement (Morrison et al., 2019).

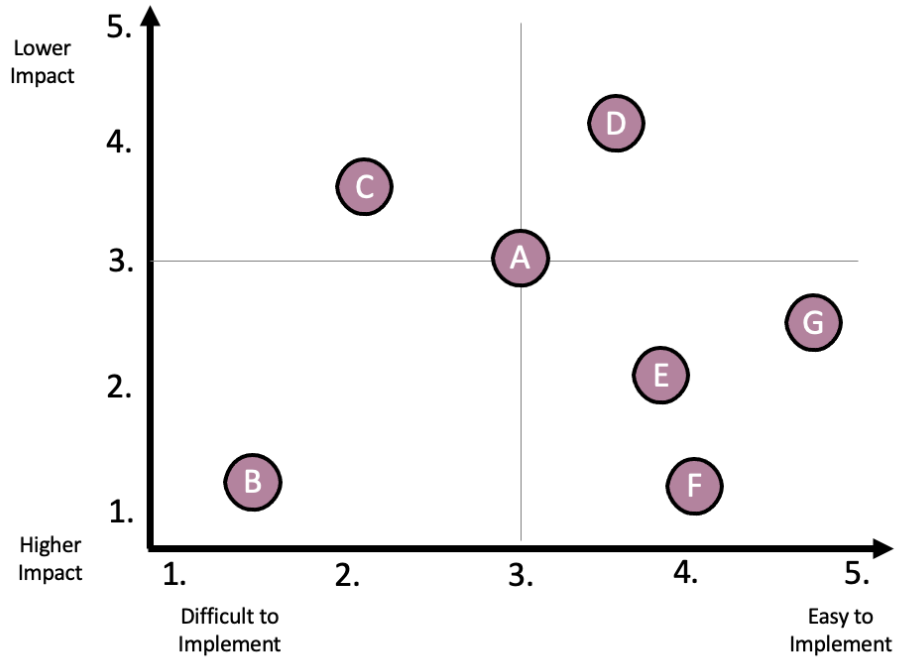
It is important to note that although change at some levels of the organization may seem incremental to some, for others, it may feel more disruptive and radical (Cawsey et al., 2016). An additional method that our leadership team could use to prioritize tasks that need to be accomplished is Lipmanowicz and Mcandless' (2014) *15% Solutions* approach. Inspired by Zohar and Morgan's (1998) 15% concept and Morgan's (2006) research on self-organization and creating "new contexts," this decision-making method allows participants to reveal the simple actions that everyone can do immediately without additional resources or permission from above. In other words, groups and individuals can make decisions by targeting actionable tasks that are within their discretion as opposed to attempting to create solutions that exist beyond their immediate scope of influence.

Morgan and Zohar (1998) argue that the 15% solution approach to change provides a message of optimism, hope and practicality while placing the potential of large-scale change within reach to all levels of the organization. They further claim that total transformation is far more likely to occur

through a series of phased initiatives rather than large-scale ones. Morrison et al. (2018) support this notion claiming that using smaller steps such as a 15% approach can be beneficial in navigating risk, particularly with groups or individuals who are not accustomed to working in agile environments. This approach is incredibly constructive for teams that are establishing new habits and routines in their collaborative work.

Figure 11

2X2 Matrix Model / Prioritization Matrix



Note. Figure 11 has been adapted from Morrison et al.'s (2019) 2X2 Matrix. The criteria used on the vertical axis align with the criteria that were employed to evaluate the three-phased solution proposed in Chapter 2. This also aligns with Morrison et al.'s (2019) rationale for selecting easier solutions first to help gain momentum, long-term engagement and establish trust among new team members. The letters in the matrix represent hypothetical action items that encompass a larger scale opportunity, each placed according to their level of impact and ease of implementation.

Next Steps

As established in Chapter 1, the long-term vision for this OIP has been to improve conditions within the CTL for multidisciplinary teams to work effectively together while bringing new knowledge, viewpoints, innovation, and creativity to their collaborative work. Using the metaphor of ecosystem, I have employed a complexity and systems approach to illustrate the various interdependent factors in our current state that are impacting the CTL's adaptive capacity to take on and execute innovative work. However, to truly enact change and respond effectively to our most pressing institutional teaching and learning challenges and opportunities, we will need to establish a shared vision for cross-disciplinary collaboration that spans beyond the boundaries of our centre. This will require cross-functional cooperation that stretches past my immediate scope of influence and necessitates both lateral and vertical coordination (Bolman & Deal, 2017) of other service departments and academic centres. I am optimistic that our academic provost and fellow academic deans and directors would eagerly contribute to a shared vision. However, when it comes to executing on strategy, I also anticipate resistance from other areas that are often hesitant to explore changes that might impact larger system structures, policy, or governance models.

Morrison et al. (2019) claim that agile leaders can see how different organizational resources and assets can be linked, leveraged, and aligned. They further state that helping others see the potential of combining our efforts in a networked environment is a practical way to leverage existing resources and use them in new and innovative ways. Therefore, to successfully establish a future-ready campus, new cross-institutional communities and networks will need to be cultivated to create new value for the institution and our learning communities. The next steps following this OIP will be to develop a sustainable institutional approach for collective problem-solving to effectively address our most pressing and complex challenges (Morrison et al., 2019).

Conclusion

In the lead-up to this final chapter, I proposed a three-phased solution for creating conditions for multidisciplinary teams to work more effectively together in the Centre for Teaching and Learning at Snow Island College. Each phase focuses on different aspects of workplace design. The first begins with a multi-level approach to analyzing and improving adaptive organizational systems and structures (Uhl-Bien & Arena, 2018). The second targets mid-level leadership and aims to enact adaptive leadership development among this group while building the capacity to detect environmental changes that may pose opportunities or challenges for Snow Island College's teaching and learning support systems, structures, and processes. The third has a broader scope focused on improving conditions for ongoing adaptation and sustainability at all levels of our organizational structure. The final approach will pull together multidisciplinary groups to form innovation task teams that can collaborate on complex strategic initiatives, execute innovation work (Setser & Morris, 2015), and collectively navigate intensive problem-solving situations (Nadler & Tushman, 1989). As this final chapter has highlighted, part of this work will actively prepare our centre to respond to the systemic challenges identified in solutions one and two and make sense of the shifting environment.

Chapter 3 concluded by providing a plan with practical components for implementing, monitoring, and communicating a successful change process. This emergent work has already started to take shape with our centre's transition to a new space. However, a focus on scenario planning combined with the monitoring framework and communication strategies will help guide us toward building a future-ready organization. The overarching goal is to actively prepare our entire centre to evolve and adapt in the face of ongoing systemic pressures (IFTF, 2020) brought on by a changing academic landscape. Creating conditions for adaptive space and the emergence of new and relevant ways of doing things will also help the CTL contribute more effectively to developing our institution's resiliency to

withstand future environmental disturbances and pursue emerging and budding opportunities to improve the experiences of our learning communities.

References

Acaroglu, L. (2017). *Tools for systems thinkers: The 6 fundamental concepts of systems thinking*. Medium. https://medium.com/disruptive-design/tools-for-systems-thinkers-the-6-fundamental-concepts-of-systems-thinking-379cdac3dc6a

Airiodion, O., & Crolley, F. (n.d.). *Implementing change management in the workplace | guide – airiodion (AGS)*. Https://Www.Airiodion.Com/. https://www.airiodion.com/managing-change-in-the-workplace/

Ali, R., & Luther, D. (2020, May 14). *Scenario planning: Strategy, steps and practical examples*. Oracle NetSuite. https://www.netsuite.com/portal/business-benchmark-brainyard/industries/articles/cfo-central/scenario-planning.shtml

Allport, G. (1997). Foreword to the 1948 edition. In Lewin, resolving social conflicts field theory in social science. (pp.5-9). American Psychology Association.

Ancona, S. (2012). *The handbook for teaching leadership*. SAGE Publications.

Arena, M. (2021). *Adaptive space: Shifting from structural to social design*. MBR Journal. https://mbrjournal.com/2021/01/26/adaptive-space-shifting-from-structural-to-social-design/

Auernhammer, J., & Roth, B. (2021). The origin and evolution of Stanford university's design thinking: From product design to design thinking in innovation management. *Journal of Product Innovation Management*, *38*(6), 623–644. https://doi.org/10.1111/jpim.12594

Bäcklander, G. (2019). Doing complexity leadership theory: How agile coaches at Spotify practise enabling leadership. *Creativity and Innovation Management*, *28*(1), 42–60. https://doi.org/10.1111/caim.12303

Bates, T. (2020, July 10). *What teaching and learning centres should focus on in time of pandemic and beyond: A video interview*. Online Learning and Distance Education Resources.

https://www.tonybates.ca/2020/07/09/what-teaching-and-learning-centres-should-focus-on-in-time-of-pandemic-and-beyond-a-video-interview/

Benner, M. J., & Tushman, M. L. (2015). Reflections on the 2013 decade award "Exploitation, exploration, and process management: The productivity dilemma revisited" ten years later. *Academy of Management Review*, *40*(4), 497–514. https://doi.org/10.5465/amr.2015.0042

Bergman, J. Z., Rentsch, J. R., Small, E. E., Davenport, S. W., & Bergman, S. M. (2012). The shared leadership process in decision-making teams. *The Journal of Social Psychology*, *152*(1), 17–42. https://doi.org/10.1080/00224545.2010.538763

Birkinshaw, J., & Gibson, C. B. (2004). Building an ambidextrous organisation. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.1306922

Black, S. (2015). Qualities of effective leadership in higher education. *Open Journal of Leadership*, *04*(02), 54–66. https://doi.org/10.4236/ojl.2015.42006

Bolman, L. G., & Deal, T. E. (2017). *Reframing organizations: Artistry, choice, and leadership* (6th ed.) [E-book]. Jossey-Bass.

Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, *97*(2), 117–134. https://doi.org/10.1016/j.obhdp.2005.03.002

Brown, M. (2015). *7 things to know about leading academic transformation*. Educause Review. https://er.educause.edu/blogs/2015/11/7-things-to-know-about-leading-academic-transformation

Buckingham Shum, S., & McKay, T. (2018). *Architecting for learning analytics: Innovating for sustainable impact*. Educause Review. https://er.educause.edu/articles/2018/3/architecting-for-learning-analytics-innovating-for-sustainable-impact

Buller, J. (2014). Change leadership in higher education: A practical guide to academic transformation (1st ed.). Jossey-Bass.

Burnes, B. (2004). Kurt Lewin and the planned approach to change: A re-appraisal. *Journal of Management Studies*, *41*(6), 977–1002. https://doi.org/10.1111/j.1467-6486.2004.00463.x

Burnes, B. (2020). The origins of Lewin's three-step model of change. *The Journal of Applied Behavioral Science*, *56*(1), 32–59. https://doi.org/10.1177/0021886319892685

Buyarski, C. (2021). Applying appreciative principles to improve systems that serve students. *Journal of Appreciative Education*, *8*, 62–72. http://libjournal.uncg.edu/jae/article/view/2178/1565

Caldicott, S. M. (2014, June 25). *Why ford's Alan Mulally is an innovation CEO for the record books*. Forbes. https://www.forbes.com/sites/sarahcaldicott/2014/06/25/why-fords-alan-mulally-is-an-innovation-ceo-for-the-record-books/?sh=fe20c707c048

Cawsey, T. F., Deszca, G., & Ingols, C. A. (2015). *Organizational change: An action-oriented toolkit* (3rd ed.) [E-book]. SAGE Publications, Inc.

Centre for Teaching and Learning. (2020). *Strategic compass.* [Citation information withheld for anonymization purposes].

Centre for Teaching and Learning. (2018). *Project blueprint.* [Citation information withheld for anonymization purposes].

Centre for Teaching and Learning. (2018). *Engagement framework.* [Citation information withheld for anonymization purposes].

Clark, T. R. (2020). The 4 stages of psychological safety: Defining the path to inclusion and innovation (Illustrated ed.) [E-book]. Berrett-Koehler Publishers.

Clarke, N. (2013). Model of complexity leadership development. *Human Resource Development International*, *16*(2), 135–150. https://doi.org/10.1080/13678868.2012.756155

Clarke, N. (2012). Shared leadership in projects: a matter of substance over style. *Team Performance Management: An International Journal*, *18*(3/4), 196–209. https://doi.org/10.1108/13527591211241024

Cleary, B. (2015). Design thinking and PDSA don't throw out the baby. *The Journal of Quality and Participation*, *38*(2), 21–23. https://www-proquest-com.proxy1.lib.uwo.ca/docview/1702874767?parentSessionId=oCgClAO7K7ShyNkhNNmmN%2BWMaaMavT%2FrgS6h5sGpRQU%3D&accountid=15115

Collins, J. (2009). How the mighty fall: And why some companies never give in (good to great, 4) (1st ed.) [E-book]. Harper Collins.

Cooperrider, D. L., & Whitney, D. (2005). *Appreciative inquiry: A positive revolution in change* (1st ed.). Berrett-Koehler Publishers.

Crossman, A. (2020a). *Everything you need to know about functionalist theory*. ThoughtCo. https://www.thoughtco.com/functionalist-perspective-3026625

Dam, R. F. (2021, January 2). *5 stages in the design thinking process*. The Interaction Design Foundation. https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process

Dam, R. F., & Siang, T. Y. (2020, July 12). *What is design thinking and why is it so popular?* The Interaction Design Foundation. https://www.interaction-design.org/literature/article/what-is-design-thinking-and-why-is-it-so-popular

Darfler-Sweeney, P. (2018). The superintendent's rulebook: A guide to district-level leadership (1st ed.). Routledge. https://doi-org.proxy1.lib.uwo.ca/l10.4324/9781315100920

Deszca, G. F., Ingols, C. A., & T. (2020). *Organizational change: An action-oriented toolkit* (4e ed.) [E-book]. SAGE Publications.

Eaton, S. E. (2020). *Teaching and learning centres are the academic heroes of COVID-19*. University Affairs. https://www.universityaffairs.ca/opinion/in-my-opinion/teaching-and-learning-centres-are-the-academic-heroes-of-covid-19/

Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, *44*(2), 350–383. https://doi.org/10.2307/2666999

Edmondson, A. C. (2012). *Teaming: How Organizations Learn, Innovate, and Compete in the Knowledge Economy* (1st ed.). Jossey-Bass Pfeiffer.

Educause. (2020). *Horizon report: teaching and learning edition*. https://library.educause.edu/resources/2020/3/2020-educause-horizon-report-teaching-and-learning-edition

Educause. (2021). *2021 Educause horizon report teaching and learning edition*. https://library.educause.edu/-/media/files/library/2021/4/2021hrteachinglearning.pdf?la=en&hash=C9DEC12398593F297CC634409DFF4B8C5A60B36E

Foldy, E. G., Goldman, L., & Ospina, S. (2008). Sensegiving and the role of cognitive shifts in the work of leadership. *The Leadership Quarterly*, *19*(5), 514–529. https://doi.org/10.1016/j.leaqua.2008.07.004

Forgie, S. E., Yonge, O., & Luth, R. (2018b). Centres for teaching and learning across Canada: What's going on? *The Canadian Journal for the Scholarship of Teaching and Learning*, *9*(1), 1–15. https://doi.org/10.5206/cjsotl-rcacea.2018.1.9

Frei, F., & Morriss, A. (2020). *Unleashed: The Unapologetic Leader's Guide to Empowering Everyone Around You* (Illustrated ed.) [E-book]. Harvard Business Review Press.

Furr, N., Nel, K., & Ramsoy, T. (2018). *If Your Innovation Effort Isn't Working, Look at Who's on the Team*. Harvard Business Review. https://hbr.org/2018/11/if-your-innovation-effort-isnt-working-look-at-whos-on-the-team

Government of Alberta. (2021). Advanced education. *Alberta Government*. https://www.alberta.ca/advanced-education.aspx

Government of Alberta. (2022). Open government program. *Alberta Government.* https://www.alberta.ca/open-government-program.aspx

Government of Alberta. (2022). Post-secondary learning act - open government. *Alberta Government Publications*. https://open.alberta.ca/publications/p19p5

Groff, B. (2021, October 12). *From map to compass: The new way to do strategic planning*. Minutes - Insights from the Internet's Brightest Minds. https://minutes.co/from-map-to-compass-the-new-way-to-do-strategic-planning/

Hazy, J. K. (2012). The unifying function of leadership: Shaping identity, ethics and the local rules of interaction. *International Journal of Society Systems Science*, *4*(3). https://doi.org/10.1504/ijsss.2012.047990

Holt, D. T., & Vardaman, J. M. (2013). Toward a comprehensive understanding of readiness for change: The case for an expanded conceptualization. *Journal of Change Management*, *13*(1), 9–18. https://doi.org/10.1080/14697017.2013.768426

Hussain, S. T., Lei, S., Akram, T., Haider, M. J., Hussain, S. H., & Ali, M. (2016). Kurt Lewin's change model: A critical review of the role of leadership and employee involvement in organizational change. *Journal of Innovation & Knowledge*, *3*(3), 123–127. https://doi.org/10.1016/j.jik.2016.07.002

IDEO. (n.d.). *Design kit* [Design methods for innovative solutions]. IDEO. https://www.designkit.org/methods

Institute for the future (IFTF). (2020). *Forecasts and perspectives*. Institute for the Future. https://www.iftf.org/foresightessentials/

International Observatory on the Social Impacts of AI and Digital Technology. (2020, August). Disruption in and by centres for teaching and learning during the COVID-19 pandemic leading the future of higher ed24 august 2020 (No. 1). https://observatoire-ia.ulaval.ca/en/whitepaper-leading-the-future-of-higher-ed/

Jackson, M. C. (2000). *Systems approaches to management* [E-book]. Springer.

Kezar, A. (2018). How Colleges Change: Understanding, leading, and enacting change (2nd ed.). Routledge.

Kezar, A. J., & Holcombe, E. M. (2017). Shared leadership in higher education: Important lessons from research and practice. *American Council on Education*. https://www.acenet.edu/Documents/Shared-Leadership-in-Higher-Education.pdf

Konno, N., Nonaka, I., & Ogilvy, J. (2014). Scenario planning: The basics. *World Futures*, *70*(1), 28–43. https://doi.org/10.1080/02604027.2014.875720

Langley, G. J., Moen, R. D., Nolan, K. M., Nolan, T. W., Norman, C. L., & Provost, L. P. (2009). *The improvement guide: A practical approach to enhancing organizational performance* (2nd ed.). Jossey-Bass.

Levasseur, R. E. (2001). People skills: Change management Tools—Lewin's change model. *Interfaces*, *31*(4), 71–73. https://doi.org/10.1287/inte.31.4.71.9674

Lewin, K. (1997). *Resolving social conflicts and field theory in social science* [E-book]. American Psychological Association. (Original work published in 1948 and 1951)

Lieberman, M. (2018). *Centers for teaching and learning serve as hub for improving teaching*. Inside Higher Ed. https://www.insidehighered.com/digital-learning/article/2018/02/28/centers-teaching-and-learning-serve-hub-improving-teaching

Maier, H. (1986). First and second order change. *Journal of Children in Contemporary Society*, *17*(3), 37–45. https://doi.org/10.1300/j274v17n03_04

Maimon, E. P., & Schneider, C. G. (2018). *Leading academic change: vision, strategy, transformation*. Stylus Publishing.

Manning, K. (2018). *Organizational theory in higher education* [E-book]. Routledge.

Markiewicz, A., & Patrick, I. (2016). *Developing monitoring and evaluation frameworks* (1st ed.) [E-book]. SAGE Publications, Inc.

McCauley, C. D., & Van Velsor, V. E. (2003). *The center for creative leadership handbook of leadership development* (2nd ed.). Jossey-Bass.

Mento, A., Jones, R., & Dirndorfer, W. (2002). A change management process: Grounded in both theory and practice. *Journal of Change Management*, *3*(1), 45–59. https://doi.org/10.1080/714042520

Mind Tools. (2021). *Lewin's change management model: Understanding the three stages of change*. https://www.mindtools.com/pages/article/newPPM_94.htm

Mintzberg, H. (2014, August 1). *The fall and rise of strategic planning*. Harvard Business Review. https://hbr.org/1994/01/the-fall-and-rise-of-strategic-planning

Morgan, G. (2006). *Images of organization* (Updated ed.) [E-book]. SAGE Publications Ltd. https://doi.org/10.2307/258079

Morrison, E., Hutcheson, S., Nilsen, E., Fadden, J., & Franklin, N. (2019). *Strategic doing: Ten skills for agile leadership* (1st ed.). Wiley.

Nadler, D., & Tushman, M. (1997). *Competing by design: The power of organizational architecture* [E-book]. Oxford University Press.

Nadler, D. A., & Tushman, M. L. (1989). Organizational frame bending: Principles for managing reorientation. *Academy of Management Perspectives*, *3*(3), 194–204. https://doi.org/10.5465/ame.1989.4274738

Naffi, N., Davidson, A. L., Snyder, D. M., Kaufman, R., Clark, R. E., Patino, A., Gbetoglo, E., Duponsel, N., Savoie, C., Beatty, B., Wallace, G., Fournel, I., Ruby, I., Paquelin, D., Akle, B., Baroud, F., Bates, T., Dede, C., Desjardin, & Winer, L. (2020, August 24). *Whitepaper - disruption in and by centres for teaching and learning during the COVID-19 pandemic leading the future of higher ed 21–08-2020.pdf*. International Observatory on the Societal Impacts of AI and Digital Technology. https://www.docdroid.com/L0khasC/whitepaper-disruption-in-and-by-centres-for-teaching-and-learning-during-the-covid-19-pandemic-leading-the-future-of-higher-ed-21-08-2020-pdf

Northouse, P. G. (2022). *Leadership: Theory and practice* (9th ed.) [E-book]. SAGE Publications, Inc.

Organisation for Economic Co-Operation and Development (OECD). (2017). *State of higher education 2015–16*. Organisation for Economic Co-operation and Development. https://www.oecd.org/education/imhe/The%20State%20of%20Higher%20Education%202015-16.pdfhttps://www.oecd.org/education/imhe/The%20State%20of%20Higher%20Education%202015-16.pdf

OECD. (n.d.). *What is foresight? - organisation for economic co-operation and development*. OECD. https://www.oecd.org/strategic-foresight/whatisforesight/#

Parker, G. M. (2011). Team players and teamwork: New strategies for developing successful collaboration (2nd ed.). Jossey-Bass.

Peters, J., & Smith, P. A. (1998). Action learning and the leadership development challenge. *Journal of Workplace Learning*, *10*(6/7), 284–291. https://doi.org/10.1108/1366562981023619

Piderit, S. K. (2000). Rethinking resistance and recognizing ambivalence: A multidimensional view of attitudes toward an organizational change. *The Academy of Management Review*, *25*(4), 783. https://doi.org/10.2307/259206

Plowman, D. A., & Duchon, D. (2008). Dispelling the myths about leadership [E-book]. In M. Uhl-Bien & R. Marion (Eds.), *Complexity leadership: Part 1: Conceptual foundations (leadership horizons)* (Illustrated ed., pp. 129–154). Information Age Publishing.

Quillen, C., & Siemens, G. (2020). *Cultivating a disciplined, creative mind and humane Instincts*. Educause Review. https://er.educause.edu/articles/2020/10/cultivating-a-disciplined-creative-mind-and-humane-instincts

Ramos-Torrescano, E. (2017, June 5). Instructional designers as (secret) change agents | IDDblog: Instructional design tips, advice, & trends for online & distance learning | educational technology and online course design help. IDDblog. https://www.iddblog.org/instructional-designers-as-secret-change-agents/

Raza, M. (2019). *Lewin's 3 stage model of change explained*. BMC Blogs. https://www.bmc.com/blogs/lewin-three-stage-model-change/

Reed, J. E., & Card, A. J. (2015). The problem with plan-do-study-act cycles. *BMJ Quality & Safety*, *25*(3), 147–152. https://doi.org/10.1136/bmjqs-2015-005076

Schein, E. H., & Schein, P. A. (2018). Humble leadership: The power of relationships, openness, and trust (the humble leadership series) (1st ed.) [E-book]. Berrett-Koehler Publishers.

Schoemaker, P. J. H. (1995). Scenario planning: A tool for strategic thinking. *MIT Sloan Management Review*, *36*(2), 25–41. https://sloanreview.mit.edu/article/scenario-planning-a-tool-for-strategic-thinking/

Schreiber, C., & Carley, M. (2008). Network leadership: Leading for learning and adaptability [E-book]. In M. Uhl-Bien & R. Marion (Eds.), *Complexity Leadership: Conceptual Foundations* (Part 1 ed., pp. 291–330). Information Age Publishing.

Schulze, J. H., & Pinkow, F. (2020). Leadership for organisational adaptability: How enabling leaders create adaptive space. *Administrative Sciences*, *10*(3), 37. https://doi.org/10.3390/admsci10030037

Schwandt, D. (2008). Individual and collective coevolution [E-book]. In M. Uhl-Bien & R. Marion (Eds.), *Complexity Leadership: Conceptual Foundations* (Part 1 ed., pp. 101–126). Information Age Pub.

Setser, B., & Morris, H. (2015). *Building a culture of innovation in higher education: Design & practice for leaders*. https://library.educause.edu/-/media/files/library/2015/4/ngt1502-pdf.pdf

Shields, C. M. (2020). Becoming a transformative leader: A guide to creating equitable schools (1st ed.) [E-book]. Routledge.

Shirey, M. R. (2013). Lewin's theory of planned change as a strategic resource. *JONA: The Journal of Nursing Administration*, *43*(2), 69–72. https://doi.org/10.1097/nna.0b013e31827f20a9

Siemens, G., Dawson, S., & Eshleman, K. (2019, October 29). *Complexity: A leader's framework for understanding and managing change in higher education*. Educause Review. https://er.educause.edu/articles/2018/10/complexity-a-leaders-framework-for-understanding-and-managing-change-in-higher-education

Skipton Leonard, H., & Lang, F. (2010). Leadership development via action learning. *Advances in Developing Human Resources*, *12*(2), 225–240. https://doi.org/10.1177/1523422310367800

Snow Island College. (2019). *Comprehensive institutional plan.* [Citation information withheld for anonymization purposes].

Snow Island College. (2021). *Niitsitapi strategy.* [Citation information withheld for anonymization purposes].

Snow Island College. (2020). *Applied research strategy.* [Citation information withheld for anonymization purposes].

Stanford University d. School. (n.d.). Start with design. Stanford d.School. http://dschool.stanford.edu/dgift

Strikwerda, E. (2020, February 26). *UCP meddling undermines Alberta universities' basic purpose* [Press release]. https://www.cbc.ca/news/canada/calgary/road-ahead-opinion-eric-strikwerda-post-secondary-ucp-meddling-1.5474466

Sull, D., & Spinosa, C. (2007). Promise-based management: The essence of execution. *Harvard Business Review*, *85*(4), 78–141. https://hbr.org/2007/04/promise-based-management-the-essence-of-execution

Sveiby, K. E. (2011). Collective leadership with power symmetry: Lessons from aboriginal prehistory. *Leadership*, *7*(4), 385–414. https://doi.org/10.1177/1742715011416892

Tierney, W. G., & Lanford, M. (2016). Conceptualizing innovation in higher education. *Higher Education: Handbook of Theory and Research*, 1–40. https://doi.org/10.1007/978-3-319-26829-3_1

Torrance, M. (2014). *What does it mean to be agile?* Learning Solutions Magazine. https://learningsolutionsmag.com/articles/1406/what-does-it-mean-to-be-agile

Tushman, M. L., & O'Reilly, C. A. (1996). Ambidextrous organizations: Managing evolutionary and revolutionary change. *California Management Review*, *38*(4), 8–29. https://doi.org/10.2307/41165852

Uhl-Bien, M., & Marion, R. (2007). *Complexity leadership: Conceptual foundations (leadership horizons) (Pt. 1)* (Illustrated ed.). Information Age Publishing.

Uhl-Bien, M., & Arena, M. (2017). Complexity leadership. *Organizational Dynamics*, *46*(1), 9–20. https://doi.org/10.1016/j.orgdyn.2016.12.001

Uhl-Bien, M., & Arena, M. (2018). Leadership for organizational adaptability: A theoretical synthesis and integrative framework. *The Leadership Quarterly*, *29*(1), 89–104. https://doi.org/10.1016/j.leaqua.2017.12.009

Van Velsor, E. (2008). A complexity perspective on leadership development [E-book]. In M. Uhl-Bien & R. Marion (Eds.), *Complexity Leadership: Conceptual Foundations: Vol. Part 1* (pp. 333–377). Information Age Publishing.

Vyas, E., PhD. (2021, May 5). *What the pandemic has taught us about change*. Forbes. https://www.forbes.com/sites/forbeshumanresourcescouncil/2021/05/05/what-the-pandemic-has-taught-us-about-change/?sh=2e26c1835239

Wheatley, M. J. (2006). Leadership and the new science: Discovering order in a chaotic world (3rd ed.). Berrett-Koehler Publishers.

Whelan-Berry, K. S., & Somerville, K. A. (2010). Linking change drivers and the organizational change process: A review and synthesis. *Journal of Change Management*, *10*(2), 175–193. https://doi.org/10.1080/14697011003795651

Zohar, A., & Morgan, G. (1998). The 15% approach: Quantum change incrementally! *Holland Management Review*, 14–25. https://www.researchgate.net/publication/266795502_Morgan_G_and_Zohar_A_1998_The_15_approach_quantum_change_incrementally_Holland_Management_Review_53_pp_14-25

Appendix A

ENGAGEMENT

The process of bringing people together to make better decisions.

WHAT WE DO (OUR PROMISE)

Engagement includes everything from informing people that a decision has been made, all the way to empowering stakeholders to make the decisions and work out the details.

These methods and this mindset are useful in communicating and interacting with your team, connecting with clients or students, as well as throughout major initiatives and decision making processes. We know no one likes to provide input and then never hear back, so reporting and evaluation are a big part of this process as well.

WHY WE DO IT (THE BENEFITS)

By engaging in collective problem solving and decision making, all stakeholders (involved or affected parties) have opportunity for input throughout the process.

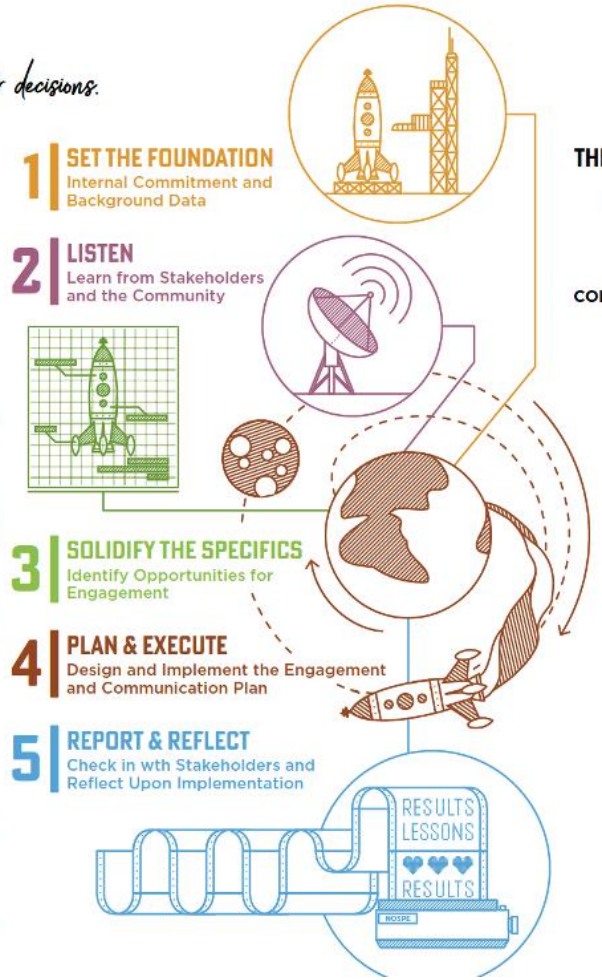
Making decisions in isolation is risky because important pieces may be missed, and outcomes may not be focused on the full picture or be beneficial to stakeholders. Utilizing engagement principles and techniques ensures that multiple perspectives are included, mutual understanding is developed, and usually results in more effective solutions and initiatives.

Democratization of information and process are important steps in creating inclusive and equitable environments; equally important is ensuring that people are engaged appropriately and in a timely manner. There are such things as over- and under-engaging. This framework (and a good communications plan) will help you strike that balance!

HOW WE DO IT (THE PROCESS)

You can infuse the engagement mindset into your daily life, in any number of ways. The engagement spectrum (found in the *Engagement Framework & Guides*) lends itself as an excellent reference tool in all decision making that involves or affects others.

As a more formalized process (for major decision making processes and initiatives), engagement can be divided into five main steps, each of which involve multiple activities. You'll learn more about these, and find helpful tools, in the *Engagement Framework & Guides*.



THE ENGAGEMENT SPECTRUM

EMPOWER

GOAL: To empower stakeholders to fully make the decisions.

PROMISE: We will abide by the decisions you make.

COLLABORATE

GOAL: To partner with stakeholders to analyze issues, develop alternatives, make recommendation, and determine the best solution for a decision.

PROMISE: We will partner directly with you throughout the project and decision making process. We will create joint solutions or recommendations.

INVOLVE

GOAL: To work and understand the viewpoints and concerns of the stakeholders through working directly with them.

PROMISE: We will work directly with you to ensure your viewpoints and concerns are reflected in the decisions made.

CONSULT

GOAL: To get feedback from stakeholders at various points in the project or before decisions are made to ensure that issues and concerns are understood and considered.

PROMISE: We will consult with you to ensure your viewpoint is heard and considered when making decisions. We will communicate how this input and feedback influenced the decisions made.

INFORM

GOAL: To create a shared understanding of the project and any decisions made through information and communication.

PROMISE: We will keep you informed about the project and decisions that are made.

INCREASING LEVEL OF ENGAGEMENT

(Snow Island College, CTL, 2018)

Appendix B

<table>
<tr><th colspan="13">Overarching Implementation Framework</th></tr>
<tr><td colspan="4">Goal 1: Foster Strategic Thinking and Awareness about Potential Impacts and Opportunities</td><td colspan="5">Goal 2: Improve Conditions for innovation and Cross-Disciplinary Collaboration</td><td colspan="4">Goal 3: Innovate Toward Radically Better Solutions</td></tr>
<tr><td colspan="13">Action-Reflection Engagement: A.R.E includes action learning leadership teams, action learning team coaching, and plenary session intensives.</td></tr>
<tr><td colspan="4">“Practice Field” for Interdependent Action
Determine which systems, structures and processes constrains or enables innovative behaviour and collaboration</td><td colspan="9">Innovation Task Teams: Develop teams to take on large-scale strategic initiatives, execute innovation work (Setser & Morris, 2015), and navigate intensive problem-solving situations (Nadler & Tushman, 1989).</td></tr>
<tr><td rowspan="11">Engagement Tools & Methods</td><td colspan="4">Empathize</td><td colspan="5">Ideate</td><td colspan="4">Monitoring & Inquiry</td></tr>
<tr><td colspan="4">Scan the Horizon (Detect signals)</td><td colspan="5">Adaptive Space (Respond)</td><td colspan="4">New Adaptive Order (Evolve)</td></tr>
<tr><td colspan="4"></td><td colspan="3">Unfreeze</td><td colspan="2">Change</td><td colspan="4">Refreeze</td></tr>
<tr><td>Sept</td><td>Oct</td><td>Nov</td><td>Dec</td><td>Jan</td><td>Feb</td><td>Mar</td><td>Apr</td><td>May</td><td>June</td><td>July</td><td>Aug</td><td rowspan="2">Appropriateness

To what extent to do CTLI systems structures, and practices support connection, organizational learning, adaptability, and future viability in accordance with their environment?</td></tr>
<tr><td colspan="6">1. Observe, engage, and empathize with CTL employees & other stakeholders to understand their experiences, issues & needs regarding systems, structures, and processes (Diagnosis Thinking)

2. Assess how various systems connect and work together.

3. Detect signals of change</td><td colspan="6">Mid-level leaders facilitate employee ideation sessions to identify potential solutions and alternative ways to reframe the problems that were defined in the previous phase. Ideation methods from IDEO or Liberating Structures are used to encourage engagement.</td></tr>
<tr><td colspan="6">Activities:
Liberating Structure: Appreciative Interviews
Liberating Structure: User Experience Fishbowls
Liberating Structure: Social Network Webbing
Culture of Innovation self-assessment tool (Setser & Morris, 2015)

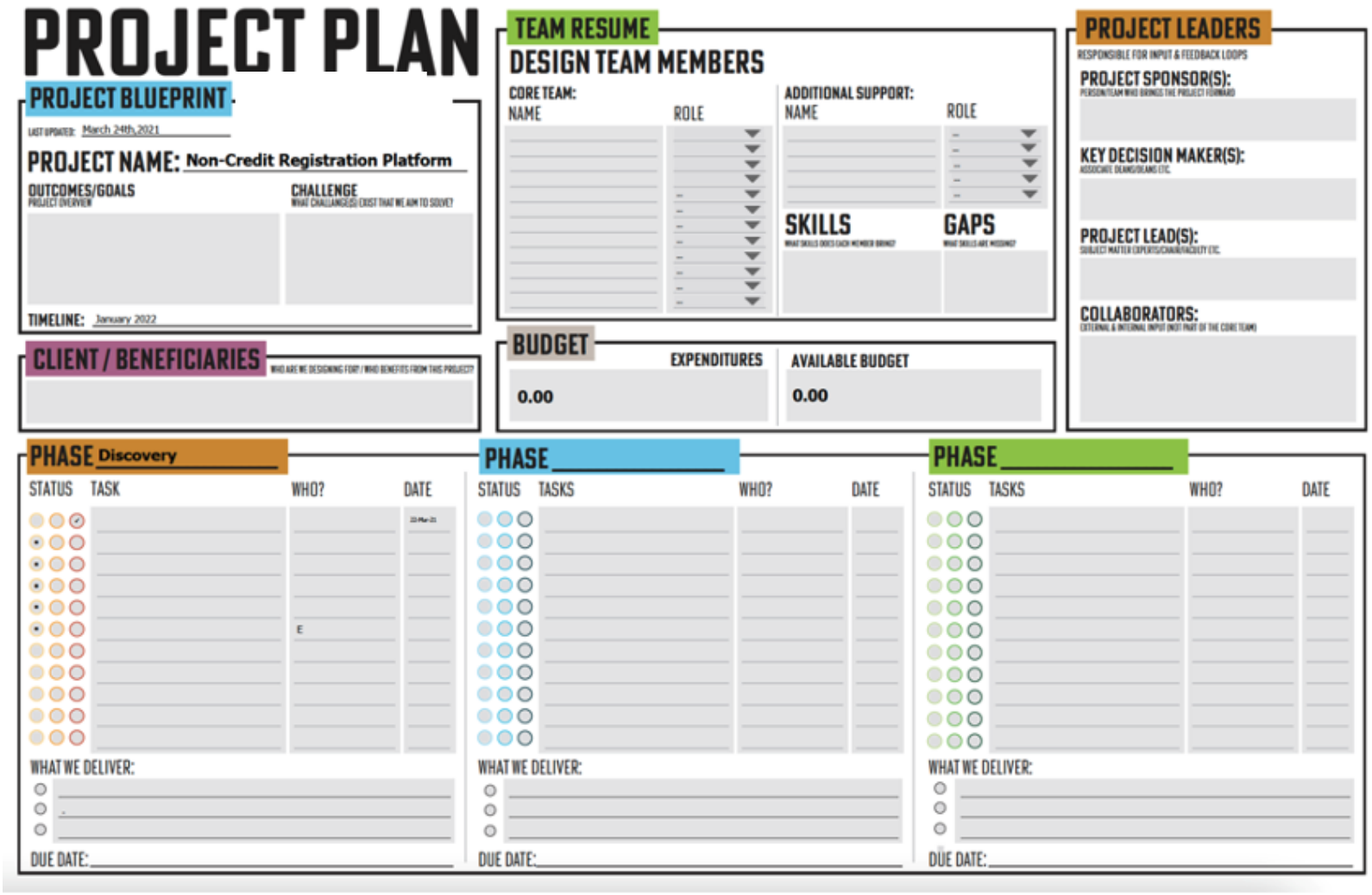
Future Institute Scenario Planning</td><td colspan="6">Activities:
Liberating Structure: Critical Uncertainties
Liberating Structure: Wise Crowds
Liberating Structure: Five Structural Elements - Min Specs
IDEO Methods Kit: How might we questions.
Liberating Structure: Ecocycle Planning</td><td>Effectiveness

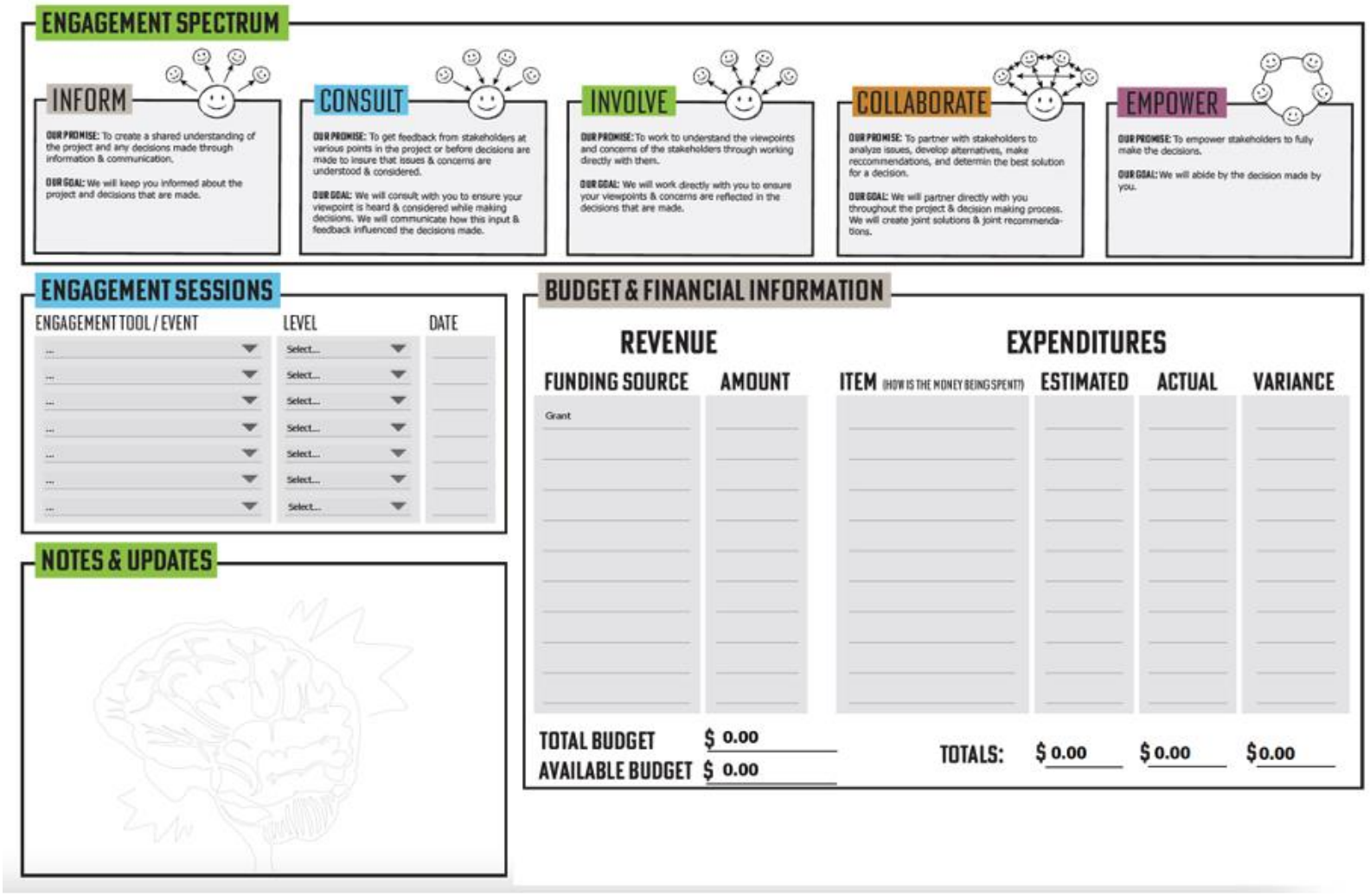
To what extent do CTL mid-level leaders employ a systematic view around strategic thinking and awareness about potential impacts and opportunities?</td></tr>
<tr><td colspan="6">Guidance: Dean, Associate Dean
Empower: Mid-level Leaders as facilitators
Participants: CTL employees, students, faculty, other service users</td><td colspan="6">Guidance: Dean, Associate Dean
Empower: Mid-level Leaders as facilitators
Participants: CTL employees, Innovation Task Teams, students, faculty, other service users</td><td rowspan="3">Efficiency

To what extent has our investment (time, cost, energy) in developing new or improved systems, structures and practices increased our overall capacity and efficiency for executing on ideas and converting them into productive outcomes?</td></tr>
<tr><td colspan="6">Define</td><td colspan="6">Prototype Test</td></tr>
<tr><td colspan="6">1. Using data collected during the ‘empathize’ phase, mid-level leaders develop key insights by analyzing and synthesizing information. The objective is to identify core problems and barriers in our current systems, structures and</td><td colspan="6">Innovation task teams develop scaled down versions of new or improved systems, processes, or service features. These are done one by one and tested and improved on with users and beneficiaries to get a sense of how real users would</td></tr>
<tr><td colspan="12"></td><td>Impact</td></tr>
</table>

	practices that impede innovation and cross- disciplinary collaboration**.** 2. Define Growth, Constraint, Collapse, Transformation scenarios	interact, behave, and feel when engaging with the end result.	To what extent do mid-level leaders support innovation by encouraging experimentation and removing barriers for cross disciplinary collaboration?
	Activities: **Liberating Structure:** Critical Uncertainties **Liberating Structure:** Generative Relationships **Liberating Structure:** Wicked Questions Morrison et al. (2019) **2X2 Matrix** **Scenario Planning** Institute for the Future	**Activities:** **Liberating Structure:** Troica Consulting **Liberating Structure:** User Experience Fishbowls **Liberating Structures**: Improv prototyping	Sustainability Was there evidence of benefits in supporting continual reinforcement and commitment to using innovative and collaborative processes and practices consistently across the CTL?
	Guidance: Dean, Associate Dean **Empower:** Mid-level Leaders as facilitators **Collaborate:** CTL employees	**Guidance:** Dean, Associate Dean **Empower:** Mid-level Leaders as facilitators **Collaborate:** CTL employees	

Appendix C


PROJECT PLAN
PROJECT BLUEPRINT
LAST UPDATED: March 24th,2021
PROJECT NAME: Non-Credit Registration Platform
OUTCOMES/GOALS
PROJECT OVERVIEW
CHALLENGE
WHAT CHALLANGE(S) EXIST THAT WE AIM TO SOLVE?
TIMELINE: January 2022
CLIENT / BENEFICIARIES
WHO ARE WE DESIGNING FOR? WHO BENEFITS FROM THIS PROJECT?
TEAM RESUME
DESIGN TEAM MEMBERS
CORE TEAM:
NAME
ROLE
ADDITIONAL SUPPORT:
NAME
ROLE
SKILLS
WHAT SKILLS DOES EACH MEMBER BRING?
GAPS
WHAT SKILLS ARE MISSING?
BUDGET
EXPENDITURES
AVAILABLE BUDGET
0.00
0.00
PROJECT LEADERS
RESPONSIBLE FOR INPUT & FEEDBACK LOOPS
PROJECT SPONSOR(S):
PERSON/TEAM WHO BRINGS THE PROJECT FORWARD
KEY DECISION MAKER(S):
ASSOCIATE DEANS/DEANS ETC.
PROJECT LEAD(S):
SUBJECT MATTER EXPERTS/CHAIR/FACULTY ETC.
COLLABORATORS:
EXTERNAL & INTERNAL INPUT (NOT PART OF THE CORE TEAM)
PHASE Discovery
STATUS
TASK
WHO?
DATE
WHAT WE DELIVER:
DUE DATE:
PHASE
STATUS
TASKS
WHO?
DATE
WHAT WE DELIVER:
DUE DATE:
PHASE
STATUS
TASKS
WHO?
DATE
WHAT WE DELIVER:
DUE DATE:



(Snow Island, CTL, 2018)