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Polytechnic Instructors as Scholars: Developing a Culture that Embraces Scholarly Activity

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Abstract

This Organizational Improvement Plan (OIP) proposes a leadership solution to develop a culture that embraces faculty scholarly activity at a large Canadian polytechnic institution. The recent advent of two baccalaureate degrees at this diploma-offering institute brought with it the provincial government stipulation that faculty teaching in degree programs must be continually engaged in scholarly activity. A previous unsuccessful implementation of this requirement addressed the functional, managerial aspects of conducting research, however faculty were unprepared for the cultural shift necessary to transform them from polytechnic instructors to scholarly polytechnic instructors. Though the requirement to research remains, early attempts at support have been abandoned, leaving degree faculty and their academic chairs adrift.

By creating a centralized institutional research hub and involving stakeholders in the process, material and informational supports would then help shift the scholarly culture towards acceptance and compliance. This OIP underscores the importance of following a prescribed change leadership process that considers both the strategic and cultural aspects of change (Bolman & Deal, 2013; Harris, 1996; Kezar, 2014; Martin, 1992; Prosci, 2016). It couches these ideas and proposals in consideration of the existing, predominant governance structure at the institute, one of transformational, distributed, and ethical leadership (Gaubatz & Ensminger, 2015; House, 1971; Kidder, 1995; Kotter, 2007; Northouse, 2016).

This OIP may be adapted to similar contexts at similar institutions, as well as to other change leadership problems where the tendency has been to focus on strategy rather than strategy + cultural change.

Keywords: scholarly activity, research, culture, faculty, instructors, polytechnic, problem of practice, transformational leadership, distributed leadership

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Executive Summary

This OIP recommends a course of action to remedy the following Problem of Practice (PoP) at a Canadian polytechnic institute: *There is a gap between the necessity for scholarly activity at the Institute and the need for change leadership to develop a culture that embraces it.*

Chapter 1 provides the organizational context of the problem in light of leadership literature, offering insights as to how leadership shapes scholarly activities at the Institute. (Allison & Richmon, 2003; Austin & Jones, 2016; Bass, 1998; Brown & Duguid, 1991; Gaubatz & Ensminger, 2015; Gronn, 2010; House, 1971; Sultana, 2012). The PoP is analyzed using Lewin's (1943) equation of $B = f(P,S)$, where *behavior* is a function of both *personality* and a given *situation*. Lewin's theory points to the importance of culture in change initiatives (Bolman & Deal, 2013; Eckel & Kezar, 2002a; Gudykunst & Ting-Toomey, 1988; Huy & Zott, 2007; Northouse, 2016).

In Chapter 2, the PoP is analyzed using scientific management, cultural, and social cognition theories of change (Kezar, 2014). The need for change is determined using the four-stage Change Path Model (Cawsey, Desczca, & Ingols, 2016) before the Prosci (2016) Change Management Model is introduced as a complementary method of structuring and guiding sustainable change. A current stage vs. future state analysis then leads to three proposed solutions for remediating the problem of practice before settling on one solution recommended as, potentially, the most effective.

In Chapter 3, detailed plans for change implementation, communication, and monitoring and evaluation of progress emerge. Finally, a discussion of next steps and future considerations concludes the OIP.

Chapter 1: Introduction and Problem

This Organizational Improvement Plan (OIP) begins by providing the present and historical organizational context of an educational institution that is the focus of this study. It presents perspectives on the Problem of Practice (PoP) and lists relevant, emerging questions. Chapter 1 also outlines a leadership-focused vision for change before addressing organizational change readiness and the envisioned future state.

Organizational Context

The first section introduces and contextualizes the organization studied in the OIP presently and historically. It outlines its mission, vision, values, purpose, goals, and explains the institution's organizational structure and established leadership approaches.

Organization Introduction and Context

The Institute studied is a post-secondary polytechnic that prides itself on its applied, participatory, work-integrated learning environments. It serves more than 50,000 learners annually, has produced more than 250,000 alumni in its 100+ years, and employs more than 2,500 staff and faculty at several campuses. Apprenticeships, diplomas, certificates, and post-diploma certificates offered in approximately 80 full-time programs range from trades to professions in healthcare, business, digital technology, and other industries the Institute serves in its province and beyond. Delivery methods include face-to-face, blended, and distance modes. It is ranked consistently as one of Canada's premier applied research colleges (Re\$earch Infosource Inc., 2017).

In 2014, the Institute added two four-year baccalaureate degrees to its offerings. Plans include the addition of a third baccalaureate degree in 2019. Other than these limited ventures

into post-secondary degree territory, the Institute exhibits no desire to encroach further upon the degree-granting university realm, nor does it aspire to become a university itself. However, it does require and expect faculty teaching in degree programs to engage in scholarly activity.

Mission, Vision, Values, Purpose, and Goals

Ideologically, the Institute places the success of its learners at the centre of everything it does. It aspires to maintain a student-centred culture using engaging instructional methods, campus life initiatives, the provision of relevant applied education curricula, and by building and nurturing stakeholder relationships on and off campus. Fairness, integrity, and respect are a few of its stated core beliefs, as are excellence, collaboration, innovation, employee success, strong partnerships, and building sustainable growth into all products and processes. It aims to extend beyond its immediate vicinity to become a world leader in applied education and has seen success in this regard with training and workforce nationalization contracts in several countries in recent years.

Research at the Institute resides in a separate Department of Applied Research and focuses on working with external businesses and entrepreneurs to supply the facilities, faculty, and students necessary to bring novel concepts to fruition and marketization—an applied industry research emphasis. In addition to supporting industry partners, research benefits the Institute through the active participation and professional growth of its faculty and students.

Organizational Structure and Current Leadership Approaches

Funded more than 50% by public monies, the Institute envisions itself as a steward serving the broader society, rather than a self-interested agent. Stewardship theory assumes that stakeholders are motivated to act in ways that benefit their larger organization (Davis, Schoorman, & Donaldson, 1997), rather than in more self-serving ways, a view that resonates in

Canadian higher education. It is informed by a clash of two cultures—a centuries-old academic philosophy, and a contemporary neoliberal ethos that speaks to the need to address economic realities of scarcity. The Institute retains substantial autonomy over its strategic, financial, and operational workings in a system that relies significantly on trust, but is sustained by audits, documentation, and the professional empowerment of Institute stakeholders. Within this autonomy lies a low-power culture of intrinsically motivated stewards where the individual contributions of the many are encouraged and respected (Austin & Jones, 2016).

At the Board of Governors level there is little awareness of daily life at the Institute. From a fiduciary responsibility perspective, the board follows the tenets of managerial hegemony and shared governance (Austin & Jones, 2016; Sultana, 2012) in that it does not receive, nor desire, information regarding daily operations. The board concerns itself with policy-making and governance oversight, ensuring the activities of the institution are consistent with its mandate.

Figure 1 is a partial organizational chart and highlights the reporting structure in relation to faculty scholarly activity at the Institute.

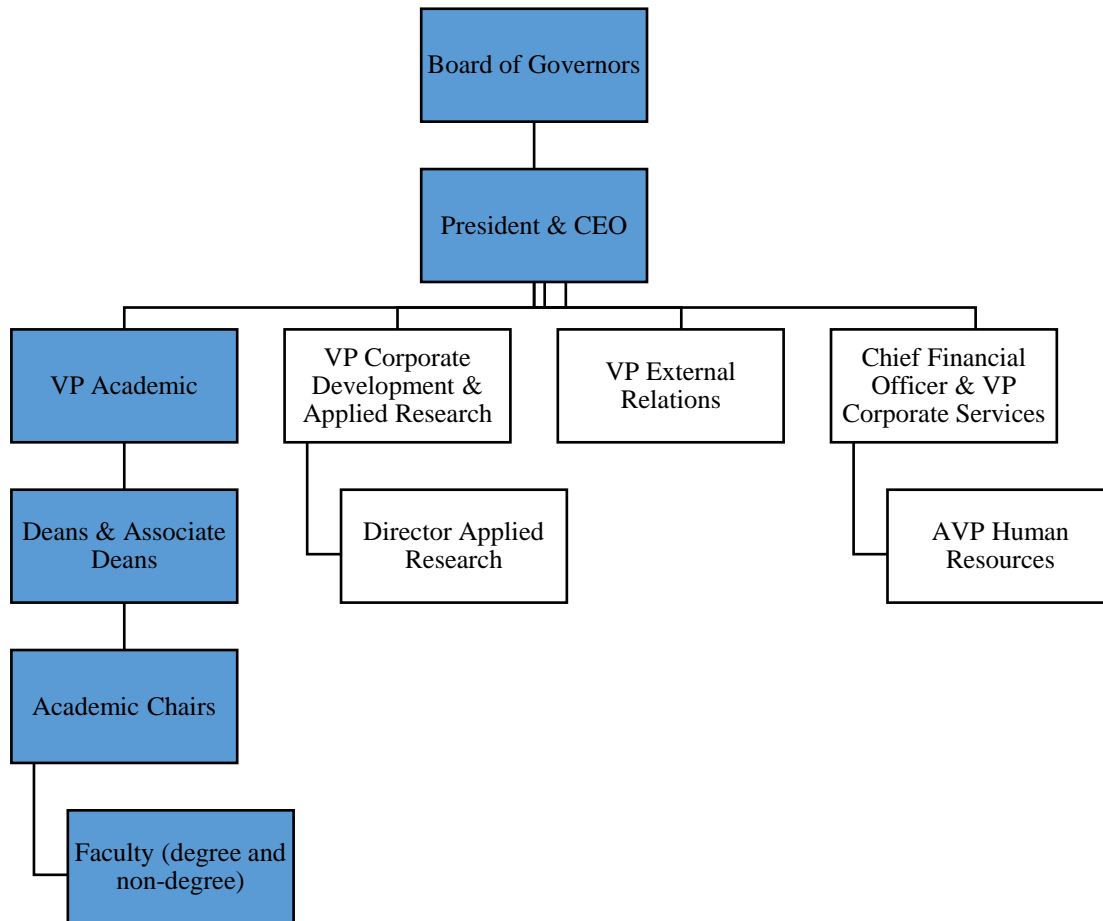


Figure 1. Partial Organizational Chart.

At the operational level, institutional governance includes a CEO and executive team of four vice presidents. The VP Academic oversees the eight schools of the Academic Division, led by deans and associate deans, where degree-related scholarly activity occurs. Major accountability for scholarly activity implementation, and the approval and tracking of individual faculty research projects, resides with the deans and associate deans. Academic chairs in the division are responsible for ensuring the occurrence of scholarly activity at the faculty level.

Leadership at the Institute comes in several theoretical and practical forms. Senior leadership is hierarchical in structure, and clarifies paths of responsibility and reporting. At this level, the Institute exemplifies a transactional, path-goal theoretical approach (House, 1971;

Northouse, 2016). Senior leaders are considered a “fit” for a leadership position based on their ability to adopt and exemplify the corporate culture and motivate their followers to achieve institutional goals. This hierarchical approach, while useful at the executive level, is not likely to succeed at the academic chair and faculty level where individual and academic freedoms compete with most leadership theories. A top-down, hierarchical approach to the problem of practice of shifting the culture to embrace scholarly activity may well have already alienated unionized faculty used to operating within a culture of academic freedom and a well-defined collective agreement.

At the next leadership level, academic chairs deal directly with daily instructor activities, including scholarly activity. The life of an academic chair includes administrative tasks, industry engagement, program development and maintenance, student issues, and the leading of faculty. While the executive level develops institutional policies, academic chairs implement these policies. This places academic chairs in an in-between position of having to liaise with a wide variety of colleagues in order to be successful, perhaps more than any other leadership category at the Institute. Peter Gronn (2010) writes that the range of leadership proficiencies when leading learning should include cognitive, ethical, and emotional capabilities. Academic chairs rely on a combination of their leadership style and capabilities to gain support for change. They overcome daily cultural, organizational, psychological, and social barriers in their teams. They must leverage the inherent and learned combinations of their leadership capabilities in everything they do. This places them in an ideal position to take advantage of the principles of distributed and transformational leadership theories (Gaubatz & Ensminger, 2015).

With a distributed style, an academic chair acts more as a “community coordinator” who allows team members to gravitate to tasks that suit their skills, abilities, attitudes, interests, and

motivations. It is a fluid, always-shifting style, where the leader's role is to guide the process, not control it. Intimidating to some for its apparent release of control, it is an approach that Gronn (2003) writes, "conceives of leadership as encompassing a diversity of forms of behaviour, numerous people, and constantly changing requirements" (p. 31). Brown and Duguid (1991) state it in more colourful terms as educational leadership that is, "held accountable to the map, not to road conditions" (pg. 42).

Transformational leadership, in its full expression, adds the following components to a distributed style: (a) idealized influence; (b) inspirational motivation; (c) intellectual stimulation; and (d) individualized consideration (Bass, *Transformational leadership: Industrial, military, and educational impact*, 1998). Combined, the two concepts of distributed and transformational leadership have the potential to create an environment that brings out the best in human nature, stimulating faculty intrinsic motivation to involve themselves in research that furthers their professional development, improves their teaching, evolves their discipline, and benefits their students. The alternative is likely to be a transactional approach, one that rewards instructors for their work and results in threatening dis-incentives for non-compliance instead of leading change by appealing to a desire for personal excellence and growth (Bass, *Transformational leadership: Industrial, military, and educational impact*, 1998).

Academic chairs who fail to exercise a distributed, transformational approach in lieu of a more autonomous transactional leadership methodology (Allison & Richmon, 2003) are more likely to cause not just failed change efforts, but also impaired relationships (Gaubatz & Ensminger, 2015). This may then lead to other chair-faculty dysfunctions in the workplace beyond the failing that has created the leadership PoP.

Scholarly Activity Defined in Context

The Institute began offering two baccalaureate degrees in 2014, a departure for this long-standing, trades-focused polytechnic. These degrees are structured in a “2 + 2” manner in that students earn a diploma after their first two years, and may or may not continue on for an additional two years to earn a baccalaureate degree. The introduction of bachelor’s degrees has come with the provincial Ministry of Advanced Education stipulation that faculty teaching in degree programs possess a minimum of a Master’s degree in a field directly related to the courses they teach. Additionally, an unspecified number of PhD instructors must teach in the program. There is a requirement for these same degree faculty to be engaged in continuous, productive, scholarly activity in one or more of several research themes identified by the Institute. However, scholarly activity is not happening consistently or in the professionally academic manner that the Ministry states it must.

In his book *Scholarship Reconsidered: Priorities of the Professoriate*, Ernest Boyer (1990) described the aim of his work as “to move beyond the tired old ‘teaching versus research’ debate and give a familiar and honourable term ‘scholarship’ a broader, more capacious meaning, one that brings legitimacy to the full scope of academic work” (p. 16). Hutchings and Schulman (1999) add to Boyer’s views with their argument that teaching becomes scholarly when it integrates present-day knowledge of topics, incorporates peer review, and involves exploration of student learning because of teaching—the precise spirit and goal of scholarly activity at the Institute. This broadened version of “scholarship” is one embraced by the Institute’s teaching-first culture in that research informs teaching, and teaching informs research. Boyer believed all faculty should participate in scholarly activity in the course of their duties, as does the Institute.

The Institute defines scholarly activity as “any activity that involves the intentional creation, integration, and/or dissemination of knowledge with a view to informing professional practice, contributing to the state-of-practice within a field, and/or impacting the broader external environment” (Institution X, 2018). This definition aligns with Boyer’s (1990) views. Further, the Institute, in collaboration with the Ministry of Advanced Education, has defined polytechnic-specific scholarly activity as needing to meet all seven of the following criteria (Institution X, 2018):

1. Has an impact on students, directly and/or indirectly.
2. Results in an output; leads to an outcome.
3. Is measurable and observable using quantitative and/or qualitative indicators.
4. Requires both knowledge acquisition and knowledge transmission.
5. Requires critical review by a variety of stakeholders (e.g., colleagues, industry, academic experts, and the academic community at large).
6. Advances subject-matter expertise and/or pedagogical expertise.
7. Contributes to a body of knowledge and/or academic discipline and/or industry practice.

Additionally, and independent of the Ministry, the Institute has defined two further conditions for scholarly activity (Institution X, 2018):

1. It must be part of a long-term, comprehensive scholarly activity plan for the individual scholar.
2. It must align with program research theme(s) and/or institutional strategic plan for research.

The Institute uses a simple form of logic model (Weiss, 1972) to standardize scholarly activity criteria and research phases. Figure 2 outlines these phases and suggests examples of what may be included in each phase. Logic models lend structure to processes. They benefit administrators in tracking faculty research progress, as well as faculty in planning their research journeys for individual projects. Though depicted in linear fashion, the process is very much iterative.

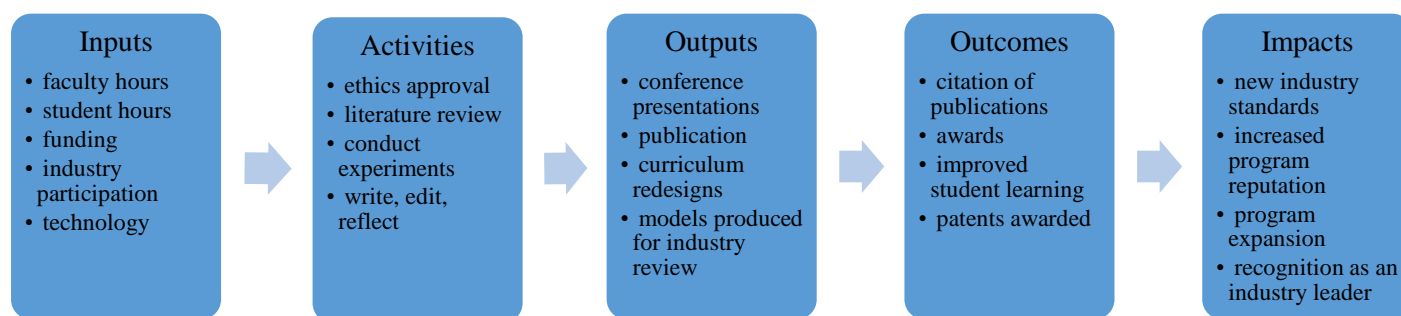


Figure 2: Scholarly Activity Logic Model (*Institution X, 2018*).

With two baccalaureate degrees offered, nine academic chairs oversee approximately 60 degree-teaching faculty in two of the Institute’s eight schools. Only full-time degree-teaching faculty are required to produce scholarly activity as a part of their official workload, though the Institute intends to eventually offer research supports and resources to any of the approximately 800 full-time faculty who wish to research. It is important here to note the distinction between degree and non-degree teaching faculty, all of whom reside professionally within the bounds of the same collective agreement. While degree faculty receive scholarly activity work hours as a part of their work “load,” non-degree faculty officially do not. “Officially” is used cautiously here as it remains within the purview of academic chairs to devote non-degree faculty teaching hours to scholarly activity at their discretion, though this would be the exception rather than the rule. Additionally, adjunct faculty are not required to conduct scholarly activity, even if they teach in degree programs.

Each full-time faculty member teaching in a degree program works with their academic chair to create a comprehensive scholarly activity plan consisting of a long-term research plan as well as one or more shorter-term projects within the plan. Both may span multiple years and must specify what can be reasonably accomplished given the number of scholarly load hours assigned. These activities become a part of formalized faculty professional development and

performance evaluation processes. The expectation is that degree faculty will report their progress to their academic chair twice annually, though adherence to this requirement is currently lacking, without repercussions to faculty. Given the iterative, unpredictable nature of research, academic chairs are instructed to *not* evaluate or performance-manage faculty on the quality or quantity of research achieved, but on reasonable, mutually agreed upon expectations of annual scholarly activity forward progress.

Institutional policies related to scholarly activity are in place, as they are at most other post-secondary institutes. They include policies related to intellectual property, academic freedom, research codes of conduct, peer review panels, privacy and confidentiality, and the Institute's research ethics board. Procedures and policies are available to all employees on the Institute's intranet, though they are not well labelled and the path to discover them is neither easy nor intuitive.

The Ministry mandates that the Institute submit an annual, detailed report of scholarly activity in order to gauge progress and compliance with the ongoing research obligations of its degree programs.

Scholarly Activity in Polytechnics

There is limited existing research specifically addressing scholarly activity implementation in polytechnics. However, there are studies on increasing and improving scholarly activity that may serve to inform the PoP, though often in different professional contexts.

Crownover and Crawford (2008) examined a six-year period of individualized scholarly activity among family medicine residents. Their surveys found that residents were not fulfilling, and in most cases not even starting, required scholarly activity. In response, they adopted an

“Areas of Concentration” (AOC) program whereby residents submitted an individualized education plan that allowed them to focus specifically on their areas of interest concerning research. In contrast to a prior program of expecting residents to pursue scholarly activity on their own in an unstructured way, the AOC self-directed approach proved to increase scholarly activity to near 100% compliance in the 13 cases cited in the study.

Similarly, the implementation of an incremental approach produced an increase in both the quantity and quality of medical resident scholarly activity among obstetrics and gynecology faculty and residents (Penrose, Praderio, Prien, & Yeomans, 2012, p. 499). With this approach, where postdoctoral researchers mentored scholars, the authors cite a striking and rapid increase in scholarly productivity of both faculty and residents during a relatively short period.

Ann Lieberman (1992) examined the social systems of schools, culture, and the process of change in relation to faculty scholarly activity. Her findings underscore the importance of emphasizing collaborative communities of practice in enhancing scholarly activity effectiveness while de-emphasizing faculty isolation.

At a similar institute to one in this OIP, Dushenko, Frandsen, & Hoekstra (2010) studied the fostering of a culture of the Scholarship of Teaching and Learning (SoTL) at a polytechnic. The authors explored the early workings of scholarly activity implementation at their institute and described the present-state, though they reached no conclusions or metrics other than their plans to continue their implementation. Many of their challenges mirror the challenges represented in this OIP such as a lack of academic chair and faculty research expertise, resistance to the change, and an overall lack of a scholarly culture, in general, with minimal research output.

All of these sources have something to offer in moving the OIP forward. While some studies focus on student research, and most concern themselves with contexts outside of polytechnics, all have commonalities to the PoP in that they deal with the social, behavioural side of those who have scholarly activity expectations placed upon them.

Leadership Problem of Practice

This organizational improvement plan is based on the following problem of practice:

There is a gap between the necessity for scholarly activity at the Institute and the need for change leadership to develop a culture that embraces it.

The offering of baccalaureate credentials depends, in part, on the provincial government's Ministry of Advanced Education stipulation that academically qualified faculty teaching in the degree programs be continually engaged in program-related scholarly activity. Risks for not meeting this requirement include putting the Institute's degrees at peril with the ministry's quality review council, as well as creating misalignment in the academic division with the Institute's stated vision of becoming a global leader in applied education.

The majority of faculty surveyed (Institution X, 2018) are comfortable and enthusiastic about the idea of engaging in scholarly activity, yet others lack research competencies or actively resisted having research added to their responsibilities three years ago with the advent of the degrees. The challenge facing the Institute is to shift a historical teaching-focused culture to one of teaching + scholarly activity such that faculty teaching in degree programs are meeting provincial ministry and institute research requirements.

Personal Leadership Position and Lens Statement

I have worked at the Institute for the past ten years in various roles: first as an instructor, then as a Faculty Development Facilitator, next as the Coordinator of Scholarly Activity

Implementation (a one-year secondment), recently as Coordinator of Industry Engagement and Program Design, and now as Academic Chair of International Projects. Five years as a faculty member on the Institute's Board of Governors helped shape my insights into post-secondary governance.

The majority of my leadership experience occurred in the hospitality industry, prior to my time in education, where I led teams of up to 200 colleagues. These diverse experiences have formed a philosophical leadership position that desires to produce adaptive, beneficial change and organizational progress. I believe leadership is a group process available to all, rather than a transactional process (Allison & Richmon, 2003) and that power as a leader does not come from position, but from exhibiting behaviours that are important to team members. Power then becomes a pooled resource available to all. My approach is a transformational, distributed team approach (Gaubatz & Ensminger, 2015) that encourages and leverages the highest attributes of all members to achieve the best possible results for the organization and the individuals involved. I believe that a formal, hierarchical, senior leadership structure at the Institute is necessary for the purposes of accountability, but that a hierarchy in decision-making and day-to-day operational governance is not necessary as it can hinder creativity and ideas.

My personal insights and analyses of the social and organizational realities at the Institute will undoubtedly influence my intentions, objectives, and theoretical assumptions in this OIP.

Theoretical Perspectives on the PoP

This section is an analysis of the problem of practice from theoretical and conceptual perspectives. It highlights historical context and cites internal and external data that informs potential paths forward with the OIP.

PoP Framed Using Lewin's Equation

In examining group dynamics and communication, social psychologist Kurt Lewin (1943) theorized that psychological events depend on the current disposition of the individual as well as their environment, though the relative importance of disposition and environment fluctuates. Lewin represented this with the equation $B = f(P,S)$, where *behavior* is a function of both *personality* and a given *situation*. The theoretical assumption is that one's situational behavior is not necessarily consistent, predictable, or personality-dependent, but is contingent on context (Bond, 2013).

Lewin's findings have stood the test of time. Though his most significant change management work occurred in the 1940s, Bridgman, Brown, and Cummings (2016) describe the unquestioned foundational significance of Lewin's work as *the* original approach to change management. Countless change management theories have been built on Lewin's ideas subsequently, yet his foundational ideas remain salient. Thus, his equation still serves the OIP well today. Horstman, Rauthmann, and Ziegler (2015) bolster this argument stating that "Lewin's Equation has thus proven to be still a good theoretical framework and may even continue to be a guideline for the description and examination of human behavior" (p. 37) in their study of personality dimensions and situation perceptions.

Independent and dependent variables rooted in the PoP (discussed later) evoke shifting situations and systems, in combination with people and their various cultures, levels of expertise, and job obligations. These variables affect behaviours. The presumption is that behaviour is adaptable, lending Lewin's equation reliability and usefulness as a theory with which to develop the OIP.

Following is an analysis of how each factor of Lewin's equation relates to the PoP.

Behaviour. The development of a scholarly activity culture is a social problem. The Institute created and socialized scholarly activity systems and procedures in 2015. A scholarly activity steering committee and implementation team of institute leaders and administrators led the creation and implementation of these systems and procedures. Neither academic chairs nor faculty, beyond a single union representative, were included in the development process. Faculty and academic chair problems with, and resistance to the change is evident to this day. This suggests that solutions to the PoP will focus on the culturally influenced behaviours of stakeholders more than operational procedures.

Personality. For only the past three years, since the advent of the degrees, has the full-time faculty hiring process included the stipulation that scholarly activity is a performance expectation for those teaching in degree programs. As such, a dichotomy exists between faculty hired with the understanding of this expectation and those hired prior to the advent of degrees. Regardless, academic chairs and faculty in degree programs have been provided with scholarly activity procedures, tools, training, and other supports. Inconsistent academic chair and faculty adoption of the scholarly initiative can be attributed to a wide range of personalities among the dozen chairs and sixty faculty required to engage. Personalities range from those who eagerly immerse themselves in multiple research projects regardless of expectations, to those who actively and openly resist engaging. This signals that personality is an indicator of faculty acceptance (or not) of scholarly activity.

Situation. Since the introduction of baccalaureate degrees at the Institute, scholarly activity productivity has flourished in some areas, lagged in others, and fluctuated everywhere. Three schools at the Institute provide instructors for the two degree programs. Though

government and institutional expectations remain consistent, each school operates independently, with different actors playing different roles at different levels of their dissimilar hierarchies. Each school has had varying levels of success with scholarly activity uptake. These diverse circumstances and interpretations are a contributing factor to scholarly activity successes and shortcomings. For these reasons, Lewin's (1943) equation is an apt theory to guide and inform the OIP.

Variables Impacting and Influencing the PoP

The institutional environment related to the PoP includes numerous variables that contribute to a lack of scholarly activity culture (see Figure 3). As adjustments to the three independent variables of *leadership*, *culture*, and *supports* occur, it is anticipated that change will follow with the dependent variables. Then, achievement of the improved state should occur by operationalizing the throughput interventions identified in Chapters 2 and 3.

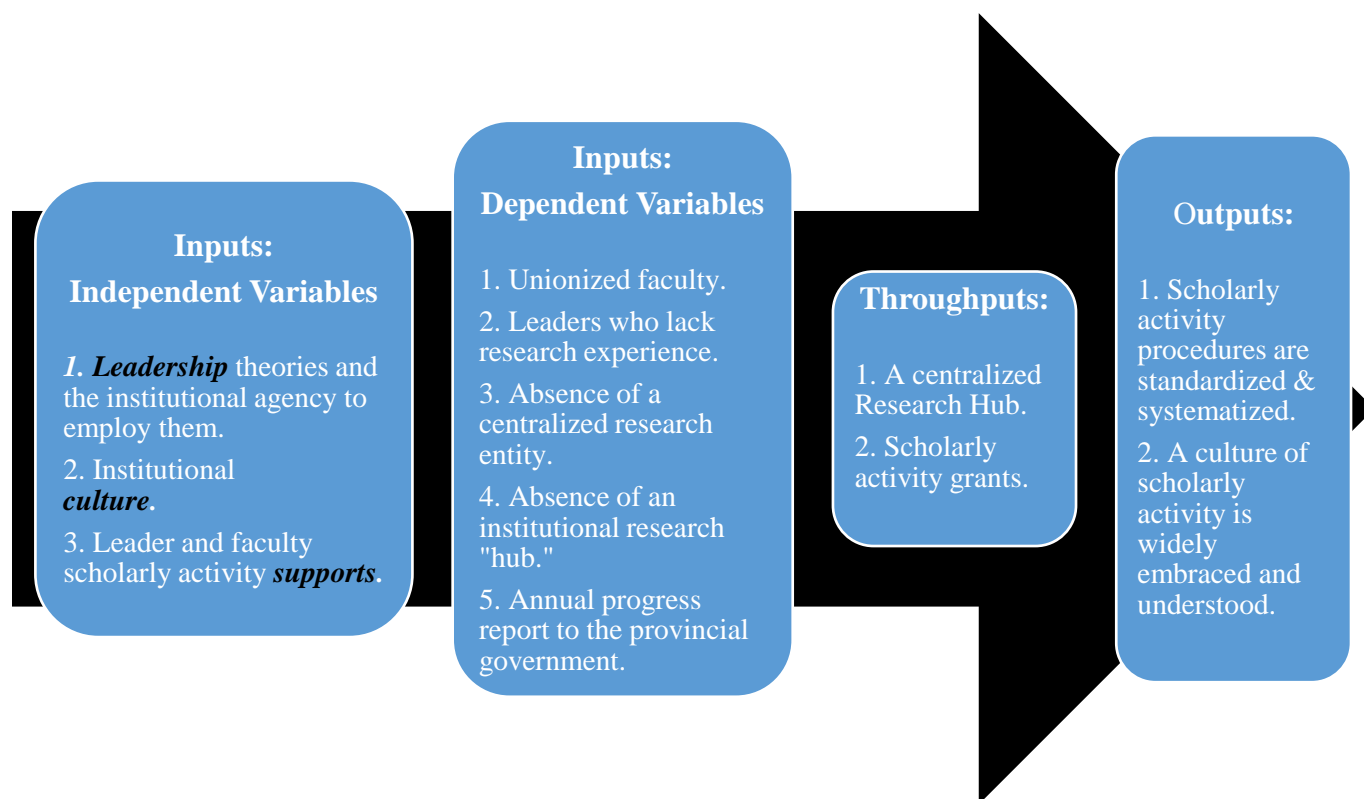


Figure 3. Intended Flow of OIP Inputs, Throughputs, and Outputs.

Leadership. With the independent variable of leadership, the Institute employs various models of governance throughout its hierarchies, as previously identified. Degree academic chair and instructor relationships are predominantly a dual transformational and distributed leadership model.

Culture. The PoP is rife with internal politics, paradigm shifts for both leadership and faculty, and deep alterations to the normal operational environment at the Institute. As such, change theories that address political, cultural, scientific management, and social cognition theories (Kezar, 2014) will prove useful in chapters 2 and 3 of the OIP.

Leader and faculty supports. Remembering Lewin's equation where behaviour is reliant on context, leader and faculty supports that are accessible and understandable are a part of the OIP context. Whether documented (e.g., scholarly activity templates, forms, institutional policies, checklists) or social (e.g., scholarly activity communities of practice, one-on-one consultation opportunities, online forums), institutional supports will contribute solutions to the OIP.

Historical Overview of the PoP Using Four Frames

Bolman and Deal (2013) argued that organizational issues should be examined from multiple perspectives or "frames." In their view, examining issues from a single, habitual viewpoint may lead to ineffective change. Introduced here to help map the PoP in its specific institutional context are the four frames of *political*, *symbolic*, *human resource*, and *structural*.

Political. Power, individual and by way of alliances, is at the centre of organizational politics during change initiatives where multiple constituents vie for influence. This is particularly true in public sector organizations, such as the Institute, where power structures are less hierarchical and power is distributed. The hope is that collaboration is a proxy for power in

decision-making and that change comes from an open process of negotiation among participants (Bolman & Deal, 2013).

The determination to introduce baccalaureate degrees, with the accompanying scholarly activity stipulation, was primarily a business decision to fulfil a societal need for degree graduates, as well as to create an educational avenue for aspiring students wishing to enter the professions served by the degrees. Over time, with anticipated increases in annual enrolments, degree programs are forecasted to be more profitable for the institute, due to economies of scale, than smaller programs with fewer enrolments. “Profitable” is used cautiously here when speaking about an institute that is mandated to financially break even, no more and no less, by the Ministry of Advanced Education. The wisdom of embarking on degree programs included minimal consultation with academic chairs and faculty beyond the executive level of the organization. This recent history suggests that constructive, collegial politics must be a part of the leadership-focused OIP.

Symbolic. Though rational business and public stewardship objectives inspired the idea of offering degrees, the prevailing culture cannot be ignored, often portrayed as symbols forming beliefs, emotions, and activities. “A symbol is something that stands for or suggests something else; it conveys socially constructed meanings beyond its intrinsic content or obvious functional use” (Huy & Zott, 2007, p. 72). People pursue and create meaning and symbols to nourish their hopes and beliefs (Bolman & Deal, 2013).

Meaningful, productive scholarly activity can nurture an institute’s reputation, creating a symbol of an institute that is at the forefront of new knowledge generation, and integrates it more deeply with the industries, society, and students it serves. Scholarly activity can drive increased enrolments, attract renowned faculty, lure outside research grants, and place the organization on

ranked lists of acclaimed post-secondary institutes. From the faculty perspective, participation in scholarly activity may symbolize an increase to their professional standing and a reputation as a thought leader. On the other hand, some degree faculty adhere to cultural symbols that are counter productive to the organization's scholarly activity ambitions, namely:

- A persona of being a teacher rather than a researcher.
- A belief that the research-first university tenure model is superior to the teaching-first model of polytechnics.
- A desire to engage in primary research, rather than applied research.
- An expectation of larger offices, increased access to dedicated librarians, and executive assistants who perform administrative tasks.
- A belief in a wider scope of research academic freedom and intellectual property rights than the Institute is currently offering.

The OIP must consider that strategy and culture are not independent of each other in change leadership. Their relationship and interdependence on each other must be considered. Presented as symbols, culture is the adhesive that connects an organization to its people, ultimately helping it to accomplish its goals (Bolman & Deal, 2013).

Human Resources. The Institute typically hires subject matter experts as instructors, often with little-to-no teaching or research experience. The Institute's faculty development department provides teacher training, though training on conducting academic research for degree faculty is not a part of their mandate.

Because faculty are unionized, any changes to work responsibilities and expectations must be a part of the collective agreement. While scholarly activity is now defined in the agreement (since 2018), it was not a part of it for the past three years since implementation, creating discord among faculty in the new degree programs that remains even with an updated agreement. It is reasonable to assume that, three years ago, senior leadership had simply planned to schedule faculty scholarly activity as an allowable, additional part of existing responsibilities,

disregarding the cultural and symbolic implications of the change to a long-unionized faculty unfamiliar with the concept of research.

Other aspects of the PoP affect the human resource frame. A core group of faculty in degree granting programs began teaching long before the implementation of the degrees, leading to a response from some of, “I didn’t sign up to do research. I signed up to teach.” Some of this group have voiced the opinion that they conducted research in the course of their masters and doctoral studies and that they have no intention of doing so again. Other faculty are willing, but are either unable or hesitant to commence research due to a lack of understanding of what scholarship is and how to proceed with it.

Compounding the human resource problems are academic chairs who have little understanding of the concept of academic research. Six of the nine degree academic chairs have achieved graduate degrees of the largely non-research variety, such as MBAs.

Structural. Increasingly in higher education, administration and faculty are decoupling and not participating jointly in the larger, democratic, big-picture strategic discussions in a move toward corporate models of governance (Giroux & Giroux, 2004; Kezar, 2014; Leicht & Fennell, 2008). A form of “economic neo-Darwinism” (Austin & Jones, 2016, p. 166) is the new norm, attributable to years of funding and support shortfalls from government. Rather than taking a more traditional, collegial governance route, the accelerating age of neoliberal, evidence-based decision-making (Paulsen & Smart, 2001) appears to have driven the initial structure of degree programs. Senior leadership put scholarly activity procedures and processes in place with the help of a steering committee, and academic chairs and faculty were to comply with the research mandate by substituting an agreed-to ratio of class contact hours with scholarly activity hours. This is an example of a corporate model of governance, rather than the more traditional higher

education model of co-creating structures that support scholarly activity and fit the Institute's given situation, in alignment with its vision, infrastructure, people, and culture (Bolman & Deal, 2013).

Questions Emerging From the PoP

In addition to the factors contributing to the problem of practice outlined previously, other questions materialize, particularly when considering the role of leadership at the Institute. Of primary concern is the scholastic experience of senior leadership.

Using post-secondary undergraduates as an example, the need to develop their research skills is of primary importance to assist their studies, develop scientific critical thinking skills, and to promote further personal/professional lifelong inquiry (Gonzalez, 2001). Scholarly activity is not learned via individual study. Rather, it occurs through learner participation, collaboration, and mentorships in a process of discovering how to navigate the intricacies of research methodologies, ethics, literature reviews, writing and editing, and the public dissemination of findings. In university settings, members of senior leadership are hired, in part, based on their research pedigrees and their ability to lead research initiatives. At polytechnics such as the one in the OIP, this is not generally the case. Only the president and a single vice president have personal research experience among the senior leadership team of five. Among the eight schools, only one dean may be placed in the same category with none presently leading the three degree-granting schools. The question emerges whether those without scholarly backgrounds are capable of fully understanding, let alone sponsoring and leading, meaningful change in this area.

Several additional challenges arise with the PoP. These are:

- Assuming OIP implementation, there is certain to be a gap in time between scholarly activity adoption and impacts. Will the provincial government continue to exercise

patience with the Institute's extended transition to scholarly activity culture? There is no record yet of an institute being placed on probation, or having a degree program withdrawn due to non-compliance.

- Given the Institute's size, why has a centralized research office or "hub," not been established, as at similar polytechnics and colleges?
- With current government resourcing scarcity, will administrators be able to expand scholarly activity supports if necessary?
- In a unionized environment, will the adoption of scholarly activity rely, in part, on retirement attrition rather than expecting existing, reticent faculty to comply?
- If the adopted implementation strategy from the OIP differs from the original implementation, but the substance and expectations on academic chairs and faculty remain, will resistant academic chairs and faculty remain resistant?

A Leadership-Focused Vision for Change

This section imagines the desired, future state once implementation of the OIP occurs.

Included are first steps and priorities for change, reflections on implementation, and the identification of change drivers.

Desired Future Organizational State

The OIP suggests a solution for creating and implementing change that narrows the gap between the necessity for scholarly activity and the need for change leadership to develop a culture that embraces it. In an improved future state, academic chairs and faculty in degree programs will understand expectations placed upon them and, as players in degree programs, embrace scholarly activity. If adopted, these changes would ideally result in individual and institutional compliance with government requirements of degree programs, academic chair and faculty fluency with research practices and norms, enhanced professional development of faculty, benefits to students in programs that remain current and progressive, and many others as outlined in Chapter 2, where three possible solutions are suggested.

Priorities for Change

A needs assessment is necessary to determine the breadth and depth of scholarly activity knowledge and expertise at all levels of the organization. Prosci's change management model (2016) is employed in Chapter 2 to provide structure and direction for moving the OIP forward. While established policies and procedures have clearly defined scholarly activity in a polytechnic sense, inconsistent messaging has permitted truths, half-truths, and fabrications to thrive across the Institute. Hindrances have contributed to the problem of practice, such as the prior absence of scholarly activity in the faculty collective agreement.

Identification of Change Drivers

Useful change drivers must be identified, and are, in Chapter 3's Change Implementation Plan. As an example, terms of reference outlining roles, goals, and synergies of the scholarly activity steering committee and academic chair community of practice already exist, but will need modification—not only does their membership exclude faculty, but it follows that their policies, practices, and procedures also exclude key stakeholder viewpoints. Potentially, other bodies and contributing players will need to emerge in the form of committees, teams, social movements, professional networks, or communities of practice, in order to scale change appropriately (Kezar, 2014).

Organizational Change Readiness

The organization will be assessed using Prosci's (2016) change management model, before planning and developing the OIP in Chapter 2. Prosci, in part, will help to determine the state of change readiness.

Understanding the Need for Change

Prosci (2016) has developed a methodology of planning and implementing change management that focuses on the social factors of organizational change. The acronym “ADKAR” represents a goal-oriented change process from inception, to realization, to sustainability. Following the letters of ADKAR, leaders must first cultivate an organizational “awareness” of the need to change before participants are capable of experiencing an inner “desire” to support change. Only then are participants open to more “knowledge” about how to change as they work on their “ability” to demonstrate new skills and behaviours. “Reinforcement” solidifies the change and helps it endure.

The conducting of a stakeholder assessment at the outset will determine their awareness of the need for change—the gap between the current state and the desired state—an indication of whether the organization as a whole is ready for the change. In this way, stakeholders’ barrier points to change are determined and may be addressed at the outset, before concrete change implementation begins.

Key Stakeholders

For successful change implementation, key stakeholders must be knowledgeable, motivated, and active sponsors of initiatives. Stakeholders in the PoP include the provincial Ministry of Advance Education, industry, senior leaders, scholarly activity champions, degree program academic chairs and faculty, human resources, and communities of practice.

Ministry of Advanced Education. The provincial Ministry of Advanced Education and the Institute communicate frequently on a variety of topics, from larger governance issues like strategic planning and budgeting to program quality, new program development, changes to existing programs, and scholarly activity requirements. Indeed, the requirement of scholarly

activity within degree programs, and this OIP itself, are a direct result of the involvement of this stakeholder. While the Ministry is directly responsible for the criterion of institute scholarly activity, and maintains authority in deciding the fate of the two degrees, it has also proven itself focused on a collaborative approach to scholarly activity implementation and the development of a scholarly culture.

Industry. The Institute has an anchoring goal of strengthening collaborative partnerships that support student success. Scholarly activity falls within this purview by connecting faculty research directly to industry-satisfying research themes in each of the three degree schools. Stronger links to industry may help to inspire faculty applied scholarly activity and in turn, inform industry about the potential for partnerships that move their interests forward in new ways.

Senior leaders. At the senior level of President/CEO, Vice Presidents, and school deans, visible sponsorship of the scholarly activity initiative is key. The development and execution of a clear communication strategy at the outset will improve the chances of buy-in at lower levels of the hierarchy. Prosci (2016) has determined that active and visible sponsorship is the number one success factor for change. The crafting and strategic dissemination of consistent, clear messaging will mitigate OIP ambiguity and misinformation later. The degree programs originally received the support of the Institute at this level, so it can be assumed that change readiness exists at the senior leadership strata. However, consideration must be made in Chapter 2 for, potentially, senior stakeholders' lack of *knowledge* about how to change the scholarly activity culture—the “K” in ADKAR.

Scholarly activity champions. Within the Institute lie “champions”—volunteer institutional resources who have been involved with initial implementation in various ways and

contribute to scholarly activity initiatives as informal players. Those acting on scholarly activity peer review panels, the research ethics board, and informal communities of practice understand the “why” and “how” of scholarly activity in relation to degree programs. Solutions moving forward will likely include further leveraging these individuals’ expertise, and having them play a larger part in supporting the OIP.

Degree program academic chairs. Change readiness weakens at the academic chair level in many cases due largely to inexperience with scholarly activity specifically, and research in general. Academic chairs merit answers to their questions of how the change aligns with the vision for the organization, why the change is happening, the risks of not changing, and how the change will affect the organization and their areas of responsibility.

Degree program faculty. Change readiness factors for faculty largely mirror those of academic chairs with the addition of the collective agreement implications previously mentioned. Faculty require an acknowledgement of their need to know what scholarly activity requirements and “wins” exist for them. The Institute typically hires faculty as teaching instructors, not researching instructors. Most are novice scholars at best. While some stakeholders will immediately grasp change readiness using the Prosci ADKAR model, faculty will require the full attention and support of change leaders, particularly at the outset, or *awareness* phase.

Human resources. Human resources must be considered a sponsor of the change in such a large, complex organization, though they are a fringe player in the initiative itself. They will require the knowledge and tools to grasp the implications of faculty scholarly activity, and how HR may positively sponsor and support it.

Communities of practice. Formal and informal communities of practice spur further learning and development of change initiatives, leading to increased innovation and effectiveness

(Wenger, 1998). Currently, informal scholarly communities exist but are entirely unstructured, small, and function only by word of mouth. Research suggests that structure aids effectiveness, but that communities of practice realize similar success whether intentionally created or allowed to form organically (Lesser & Storck, 2001).

Overcoming Resistance

Kezar (2014) contends that resistance is not inevitable, but rather the result of a poor initial approach. While this purist view may be useful for new change initiatives, the Institute has already experienced both active and passive resistance to the scholarly activity mandate begun in 2015 from faculty, its union representation, and academic chairs. For example, between the advent of the scholarly activity mandate in 2015 and present day, two-thirds of the institute's requisite scholars have produced no scholarly outputs. When questioned, these individuals most often cite their non-compliance as intentional. Their reasons range from a lack of scholarly activity procedural understanding to a lack of time, but invariably they cite a lack of repercussions if they *don't* actively launch projects and show progress. Many faculty, when pushed to compliance by academic chairs, have spoken with their union's representatives. The union has supported these faculty knowing that the institute would not push back due to scholarly activity's absence from the collective agreement.

Change must be culturally coherent to its stakeholders. Numerous studies show that resistance to change does not result from opposition to it, but because players do not understand the change and its alignment with their world views (Kezar, 2014). Resistance to change is typically viewed as a negative obstacle that must be overcome, and change literature reinforces this (Bommer, Rich, & Rubin, 2005). Scholarly activity resisters, for example, express a deep concern for the direction of the organization, in contrast to the more common view of resisters as

pessimistic obstructionists determined to derail all change (Austin, Reichers, & Wanous, 1997).

A more productive approach is to treat resistance as an opportunity for communication with resistant stakeholders by including them in decision-making and new process developments. This is in keeping with the transformational and distributed leadership styles prevalent at the academic chair and faculty levels.

To begin the process of dispelling resistance, leaders (sponsors) at the highest level must actively and visibly support the change by way of a structured communications plan (Prosci, 2016) that clearly and accurately outlines the change and the reasons for it. This provides integrity for the change by highlighting full organizational commitment at the outset.

Conclusion

Chapter 1 introduced the organization studied in this OIP, providing historical and present-day descriptions and insights into how its structure and leadership influence and shape scholarly activity at the Institute. In framing the problem using Lewin's equation, it becomes apparent that culture, in its various forms, plays an essential part in change leadership initiatives. That is, the problem is examined socially where stakeholders' leadership, followership, behaviours, personalities, and situations interact. Bolman and Deal's four frames (2013) offer further insights by shedding light on the political, symbolic, human resource, and structural factors influencing the problem.

Subsequent to Chapter 1's analysis, Chapter 2 begins to shape a detailed plan for remediating the problem of practice by providing theoretical frameworks and potential solutions using suggested leadership approaches, and by introducing leadership ethics in organizational change.

Chapter 2: Planning and Development

Chapter 2 builds on Chapter 1 themes by offering a framework for change leadership that develops a culture that embraces scholarly activity. Organizational change theory and detailed approaches for addressing the change precede a critical analysis of the Institute and its gap between current and desired state. This chapter proposes three potential solutions to the Problem of Practice (PoP), and ties appropriate theoretical leadership approaches with the one chosen solution.

Framework for Leading the Change Process

Six schools of thought on theories of change in higher education are common (Kezar, 2014, p. 22). They are:

1. Cultural
2. Evolutionary
3. Institutional
4. Political
5. Scientific management
6. Social cognition

Within these categories, Kezar recognizes first and second order degrees of change that speak to the nature of the change undertaken. Most changes happen in concert with each other across multiple levels, not in isolation. Levels of change are important because they provide a starting point for choosing appropriate change strategies.

First order change refers to less significant improvements or alterations. These are typically linear processes, minor changes in existing systems, and easy procedural changes. They are generally simpler for participants to accept, internalize, and practice. Among the six schools of change theory, evolutionary, institutional, political, and scientific management usually represent first order change.

Second order change involves transformations that are deeper and more difficult and include cultural, social cognition, and political aspects. They are less common than first order changes and require different strategies and greater implementation time. They take longer for participants to understand, accept, and internalize.

Of the six schools of thought, three are discernable in the PoP and will help to identify and analyze strategies for implementing change: *scientific management* (first order change), as well as *cultural* and *social cognition* theories (second order change).

Scientific Management

Scientific management theories speak to the rational, surface aspects of change, with which most leaders are familiar. The Institute has a long history of strategic planning, quality management, and the creation of systems and procedures—all hallmarks of scientific management theories that create structure where there is complexity. This is a positive component of the PoP. Since scholarly activity was originally implemented in 2015, processes and procedures that address tangible, operational needs have been put in place. However, aspects of the deeper and more difficult to discern cultural, social cognition, and evolutionary elements have not.

Cultural

As Bolman and Deal (2013) see it, “Culture forms the superglue that bonds an organization, unites people, and helps an enterprise accomplish desired ends” (p. 253). When change is aligned with the existing culture, change comes easier (Kezar, 2014). However, change initiatives often disregard institutional culture. Individuals, organizations, and professions all have their cultures, and interpret their cultures differently. Add to this the reality of differing interpretations of cultures, each individual’s conscious and subconscious personal views of

culture, and the constant evolution of cultures, and the challenge of this second order change becomes apparent and significant.

The PoP is not new change for the Institute—it has four years of history that could upend any new organizational improvement change plan if culture is not considered. Kezar and Eckel (2002a) suggest that change agents adopt the mindset of anthropologists when assessing culture and its underlying history, values, rituals, symbols, and language.

Social Cognition

Social cognition theory proposes that deep, second level change is enacted through individuals, their behaviours, and their thought processes, whether conscious or subconscious (Harris, 1996; Kezar, 2014; Martin, 1992). This complicates change in that each individual interprets their environment differently and forms their own mental models and paradigms. Resistance to change can appear obstructionist in nature, but may actually be attributed to a misunderstanding of the change itself, or how the change fits into an individual's worldview.

Similar to cultural theories of change, the key to enacting change strategies related to social cognition theory is to facilitate processes that help participants reframe and make sense of change, with a view to altering their deeply held beliefs. This is what makes second level change so complex and difficult to accomplish. Cultural and social cognition changes are iterative, often illogical, sometimes volatile, and rarely come with defined endings as the depths of participants' worldviews are challenged and altered.

Prosci ADKAR

Chapter 1 introduced Prosci's (2016) change management process as a means of assessing the organization's change readiness and eventually managing change. In Chapters 2 and 3, Prosci is applied as the central change leadership method in the OIP, incorporating the

separate concepts of scientific management, cultural, and social cognition in a multi-theory approach.

The three-phase Prosci approach will be applied to the OIP:

1. Preparing for change
2. Managing change
3. Reinforcing change

Each phase will connect with Prosci's ADKAR model of successful change: *awareness, desire, knowledge, ability, and reinforcement*.

Phase 1: Preparing for change. Phase 1 begins by outlining multiple aspects of the change initiative: the change strategy is defined, the change management team is prepared, and project sponsorship is developed.

Each change strategy includes risks, depending on the kind of change and the characteristics of the organization. Having an awareness of these risks can help inform change management directions. Prosci's tools will be used to assess such risks at various levels of the organization, such as stakeholder readiness or resistance to change, assumptions about their abilities, or senior leadership's unwillingness to participate as sponsors of change. These assessment tools help by creating representations of the strengths and weaknesses linked to the change, and help in forming strategies.

Once a strategy is in place, formation of a change management team leads to the identification of projects within the OIP. At this stage, the naming of project sponsors—those with the positional power to influence change—is key.

Phase 2: Managing change. In Phase 2 of the Prosci process, change management plans become activities, and implementation of these activities begin.

The first step is to develop and launch a communication plan. Impacted groups are identified, key messages for each group are created, and sponsors are recruited as the preferred senders of those messages. Then, a sponsor roadmap is produced that maps activities and encourages sponsors to become involved in active and visible roles. Sponsors are generally the broadcasters of key messages and must be coached to deliver the right messages to the right groups in the right sequence. While sponsors are not a part of the project management team, nor a part of the change-affected individuals, they help build coalitions with direct communication to all parties.

Training is also planned and executed in Phase 2. By this point, impacted individuals have developed awareness and a desire to participate in the change. They must then be trained in order to equip them with the knowledge and ability to participate and be successful. This is also the optimal stage to manage resistance through training and education about the change.

As the change management activities of Phase 2 begin, they connect to Prosci's ADKAR individual outcomes continuum in various ways, as indicated in *Figure 4*. For example, building a sponsor roadmap develops stakeholder awareness, desire, and reinforcement of change. Or, managing resistance increases stakeholders' desire to participate in the change. In matching the change management activities with one or more individual outcomes (of awareness, desire, etc.), change leaders are intentionally addressing OIP actions while ensuring desired outcomes are happening synchronously.

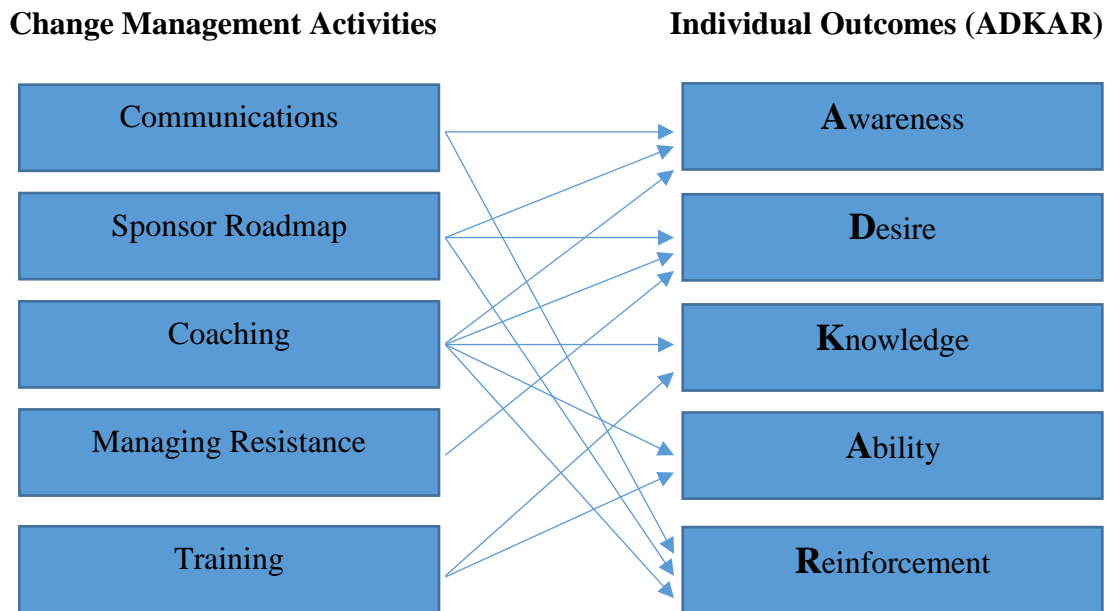


Figure 4. Connecting Organizational and Individual Change Management.
Adapted from Prosci Change Management: A Pictorial Review of the Prosci Change Management Certification Program, p. 40. Copyright 2017 by Prosci.

Phase 3: Reinforcing change. Phase 3 of managing the change involves reinforcement of OIP concepts and practices in order to “cement” change in stakeholders. Reinforcement can occur in the form of performance appraisals, operational key performance measurements, acknowledgements of appreciation, and through various incentives.

Prosci’s iterative change management process allows for not only the creation of an action plan and 360° view of the change, but also the linking of the plan to outcomes assessments and results along the way. It also allows for the slower-developing social/cultural change aspects of a new scholarly culture, providing affected stakeholders with opportunities to make sense of and reframe their thinking about the change, in keeping with deeper, second level social cognition theory.

Critical Organizational Analysis

This section applies a needs assessment to analyze the gap between the present state and the desired future state as a step toward planning and realizing organizational improvement.

A Gap Analysis Model

While use of the Prosci (2016) change management model adds structure to the OIP, the model makes no allowance for performing a preliminary needs assessment to highlight organizational gaps. Rather, Prosci's starting point assumes that the need for change has already been determined. In light of this deficiency, a portion of Cawsey et al.'s four-stage Change Path Model (2016) is used here to help determine need and propose paths forwards. The authors suggest four foci for developing an understanding of the need for change to begin to create awareness and legitimacy for it, noted in Figure 5.

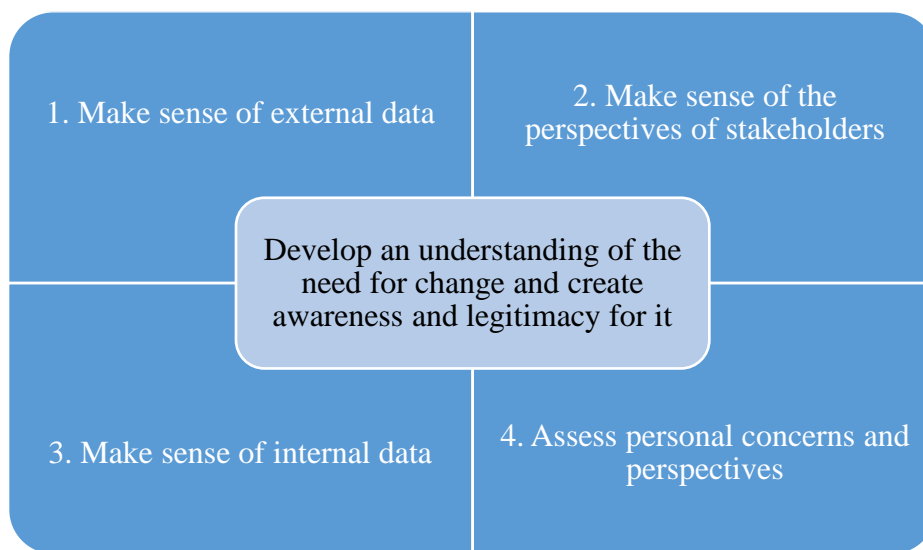


Figure 5. Need for Change Foci (Cawsey et al., 2016).

Stage 1: Awakening. Awakening involves making sense of external data by examining the external environment and its implications for the PoP. This can mean observing external

entities and their demands on and about the PoP as well as the outward effects that solving the problem will have on external individuals and groups. By considering external data, change leaders can break free of a closed-loop thinking trap that contemplates only the internal, institutional aspects of the problem.

The need for developing a functioning scholarly activity culture is primarily an externally imposed criterion by the provincial Ministry of Advanced Education. Since the Institute wishes to offer baccalaureate degrees, it must comply. However, in the case of the greater society, a culture of scholarly activity can also serve more than ministry compliance. An externally imposed need to solve the PoP exists in that scholarly activity and applied research in all forms benefit the inexhaustible needs of industries connected to the Institute. Research, in turn, benefits programs, faculty, and students. Further, one could make the argument that an expectation of publicly funded universities, colleges, and polytechnics is that they contribute at least some of their research resources in service of the greater good of the societies that support them.

Stage 2: Mobilization. Though the Change Path Model (Cawsey et al., 2016) suggests we make sense of the perspectives of both internal and external stakeholders, the PoP is largely an internal stakeholder issue. Internal stakeholder perspectives hold the largest and most significant implications for the PoP and highlight the greatest need for change. Their perspectives represent not only its largest obstacle, but also provide the largest opportunities for problem remediation. Expanding upon Chapter 1, the perspectives of internal stakeholders include

- senior leaders who decided to implement the two degree programs;
- scholarly activity champions who voluntarily serve as mentors, coaches, peers, and research ethics board panel members;
- degree program academic chairs who support, but are largely ill equipped to lead, scholarly activity implementation;

- degree program faculty who must ultimately create, participate in, and sustain a culture of scholarly activity;
- human resources employees who direct the recruitment and retention of academic chairs and faculty experienced in, and motivated by, teaching and research (these stakeholders also support the performance management challenges and successes of internal stakeholders);
- communities of practice who voluntarily mentor, coach, and support each other in scholarly pursuits.

Each of these different stakeholder groups must possess an awareness of the reasons for change and the impacts on them, as we all do during change. Together, they represent numerous perspectives for supporting and resisting change. They reinforce the need for an Organizational Improvement Plan that addresses the professional and cultural aspects of scholarly activity. Even after the implementation of a plan that employs evidence-based change leadership initiatives, some stakeholders may continue to resist. However, ignoring such individuals will make things worse and may even increase resistance, as evidenced by the pockets of faculty resistance that remain today from the original scholarly activity implementation in 2015.

Proposed solutions for resistance include engaging high-level change sponsors in not only mitigating internal stakeholder concerns through key messaging and two-way communication, but also in immersing them more in the PoP in the hope that such immersion will affect their own perspectives. It is the sponsors' role to not only to support change, but to also be influenced by stakeholder perspectives, strengthening their own analyses and highlighting blind spots and alternative solutions (Cawsey et al., 2016). A lack of strong sponsor engagement in the change was one of the fundamental oversights in the initial implementation of scholarly activity.

Stage 3: Acceleration. This stage suggests that we endeavour to make sense of internal data that will affect the change. A majority of degree faculty who must engage in scholarly activity had not done so as of late 2018 even though they had as much as 30% of their work

hours specifically earmarked as scholar activity “load.” A 2018 audit revealed that 42 of 58 faculty in degree programs had not participated in a Review and Recommendations Peer Review Panel—considered a starting point for research projects. Complicit in this are several degree program academic chairs who have evidently chosen to *not* performance manage their non-compliant faculty, and the senior leaders of academic chairs who have in turn not performance managed their teams to acquiescence. Granted, as outlined in Chapter 1 and detailed in the next section, collective agreement incongruences discouraged performance management actions on the part of leadership prior to 2018, when scholarly activity did not appear in the agreement.

Stage 4: Institutionalization. Stage 4 of the Change Path Model asks that, among other things, personal concerns and perspectives within the organization are assessed. In assessing the need for change, so-called “hard” internal data is no more important than the “soft” intuitive data (Cawsey et al., 2016) gleaned via conversations and interactions with stakeholders. Understanding individuals’ perceptions and acceptance (or not) of the scholarly activity mandate helps to evaluate the need and level of change leadership required.

In numerous conversations with degree academic chairs and faculty, several themes have emerged that point to the veracity of the problem of practice and the need for an organizational improvement plan. These themes include

- a lack of understanding about what constitutes scholarly activity at a polytechnic;
- a lack of awareness of available supports;
- faculty who are scholarly active, but are doing so incorrectly per ministry, institutional, and accepted academic standards;
- faculty who are unwilling to engage in scholarly activity as an added responsibility of their roles;
- faculty and academic chair apathy toward an initiative for which few have been held accountable to date.

In analyzing the need for change and as the author of this OIP, I acknowledge my biases. In 2017-2018, I was seconded temporarily as Coordinator of Scholarly Activity Implementation,

which provided me with the insights that comprise this OIP. My objective in this role was to lead the implementation of scholarly activity processes, procedures, practices, and norms into the Institute's day-to-day operations. Additionally, a previous two-decade career in the private sector has also influenced my beliefs about the positive and negative effects of a neo-liberal, business-world ethos in higher education. That is, that the ideals and traditions of academia are often in conflict with the ideals and traditions of the corporate world—an issue at the nexus of this PoP. An additional lens, and possible bias, exists in that I have been a faculty member at the Institute for ten years, providing me with an understanding of the plight of busy instructors asked to perform a considerable new job task for which most are ill equipped in both knowledge and skills. While these examples serve to highlight my potential biases, they also serve to highlight my insights.

Cawsey et al.'s (2016) stage 4 of the Change Path Model is revisited in Chapter 3 as it also plays a role in the institutionalized monitoring and evaluation of change initiatives.

Analysis – Current State vs. Future State

This section describes the current position of the Institute in relation to the PoP: *There is a gap between the necessity for scholarly activity at the Institute and the need for change leadership to develop a culture that embraces it.*

Then, it imagines the desired future state of the organization: *Scholarly activity is embraced, output is increased, and the reputation of the Institute grows.*

Current state. The expectation since 2015 has been that full-time faculty teaching in degree programs engage in scholarly activity in addition to instructional duties. This change has challenged a long-standing structure and culture of instructors who teach and the academic chairs who lead them. For the most part, neither group was prepared for the world of identifying

funding sources, forming research questions, choosing and employing research methodologies, navigating research ethics board approvals, collecting data, disseminating findings, and the many other requirements of formal academic research.

To support the additional requirement of scholarly activity, the Institute established a Scholarly Activity Steering Committee. This group of senior leaders guided policy decisions and delegated the work of generating the necessary forms, templates, and other helpful research documentation for academic chairs and faculty—the “machinery” of academic output, as it were. To support leaders, a Degree Academic Chair Community of Practice was also established. However, the Institute disbanded both groups in early 2018, believing they were no longer needed because scholarly activity had, between 2015 and 2018, been successfully implemented.

A significant roadblock to scholarly activity implementation during its first four years was the absence of provision in the faculty collective agreement. Though scholarly activity was never technically in contravention of the agreement, the requirement stretched the boundaries of accepted faculty job duties. This was the main catalyst of faculty resistance to the change, and meant that senior leadership was reticent to move full scholarly activity implementation forward in 2017-18 while contract renegotiations were underway. A new contract was ratified in mid-2018 and now includes a rudimentary definition of degree faculty scholarly activity, but few specific parameters. Though a persistent research-reticent culture continued through 2018, a new culture of academic chairs who tend not to performance manage their faculty into compliance has emerged. This is because, until the new collective agreement was in place, they *could not* reasonably performance-manage scholarly activity for fear of provoking a grievance from the union, upsetting ongoing contract negotiations, and alienating their faculty.

Also conspicuous in the current state is the lack of a central research hub. Most other post-secondary institutes—universities, colleges, and polytechnics alike—centralize commercial and academic research activities in order to experience operational efficiencies. This is easy to note in that a “Research” link appears on their internet home pages, but not on the home page of the institute studied here. The expectation from academic division leadership is that scholarly activity administration should occur individually within the three schools who offer degree programs.

Future state. The imagined future state upon OIP implementation is one where

- scholarly activity procedures are standardized and systematized, freely and transparently available to all;
- a culture of scholarly activity is widely embraced as a means of creating knowledge, engaging industry partners, professionally developing faculty, and benefitting students.

Indicators of success will include

- increased scholarly activity output;
- quantities and quality of scholarly activity that meet or exceed provincial ministry requirements;
- recognition by external stakeholders of this success noted by requests for research partnering.

The immediate need is to increase both the quantity and quality of scholarly activity output. Failure to do this puts the Institute and its degree programs at risk in the near term. Such risks include further faculty and leadership disillusionment with the idea of institutional scholarly activity, as well as possible punitive sanctions by the provincial Ministry of Advanced Education in relation to the two degree programs.

Per the Vice President Academic, an overarching goal since 2015 has been to provide the entire Institute with the ways and means of participating in scholarly activity beyond degree faculty. Supplementary funding and defined research work hours for non-degree faculty are

likely to remain elusive and difficult to realize, given financial constraints now and into the near future. However, the larger institutional vision within the academic division is to provide opportunities for scholarly activity training and supports for those who wish to research in addition to their full-time duties as employees, and without the benefit of additional time or compensation.

Should successful implementation of the OIP occur, and the Institute begins to realize a thriving scholarly activity culture, success would present itself in many ways, such as:

- An increase in students attracted to programs for their research potential.
- More favourable reviews on both student and faculty satisfaction surveys.
- Improved student learning experiences and achievements.
- An influx of research-focused faculty who choose to teach at the Institute.
- Faculty who publish, present, or become renowned as experts in their field of expertise or are “in demand” for appearances, collaborations, and further research.
- New teaching and learning practices in labs and classrooms.
- Improved pedagogy in the way programs and courses are designed.
- New or improved products, technologies, and practices that have been adopted by industry.
- Increased government and private research funding as institutional scholarly reputation expands.
- The awarding of patents and establishment of intellectual property revenues.
- External academic and media recognition for research accomplishments.
- Creative work that is recognized in its field by experts.
- New partnerships with leaders in business, government, and industry locally and internationally.
- Greater collaboration among faculty researchers.
- A more robust, vibrant, institutional scholarly culture.
- Expanding research confidence and motivation across the institution, not just in degree granting programs.

In the following section, three solutions to the PoP are proposed. Each will incorporate aspects of the OIP previously discussed, including the organizational context, theoretical perspectives, key stakeholders, and the organization’s change readiness.

Possible Solutions to Address the PoP

Three possible solutions to the problem of practice are presented here, along with the benefits and disadvantages of each. Then, one course of action will be chosen as a recommendation.

Solution 1: Do Nothing

Maintaining the status quo—in effect, determining that the PoP as presented here is either non-existent or not significant enough to warrant corrective action—is the first option, and one the Institute appears to have chosen already.

2018 saw the elimination of many scholarly activity supports. The Scholarly Activity Steering Committee, Degree Academic Chair Community of Practice, and the position of Coordinator of Scholarly Activity Implementation were eradicated. Remaining scholarly activity supports include the Research Ethics Board, library, and one person who oversees the compilation of the annual progress report to the Ministry of Advance Education each October as a small part of their job description. The Department of Applied Research has remained intact and distinct from the academic division's scholarly activity.

Resources needed. There is little need of additional resources with this solution, and the resource-savings by collapsing committees are immediate.

Time. No time is needed for implementation of Solution 1. Savings in institutional time would be realized immediately for those involved on related committees, as the aforementioned supports dissolve. However, an increase in time-spent on scholarly activity would likely evolve, as academic chairs and faculty spend more time seeking solutions to their challenges in isolation.

Human resources. With the disbanding of committees, human resource needs would lessen. Any gaps needing to be backfilled later with new support positions are difficult to determine until this solution has run its course for a period.

Fiscal resources. There would be no need for additional funding with this solution in the short term.

Information. With the aforementioned anticipated offering of a third degree in 2019, information and supports will be required as those connected to the new program implement scholarly activity among their academic chairs and instructors for the first time.

Technological resources. Software advances, automation, artificial intelligence, and data analytics that can track, monitor, and report scholarly activity would likely be sought, and adopted, on an ongoing basis, though who would champion these causes is not clear.

Benefits and disadvantages. The focus of this solution lies in reducing centralized efforts and resources. It places the work of initiating, tracking, and performance managing scholarly activity in the hands of the schools themselves. This could potentially encourage a positive, entrepreneurial mindset as the schools adapt to not having the supports previously provided. Conversely, it could prompt schools to reduce their research output and supports as they focus on initiatives deemed more urgent/relevant than scholarly activity.

Maintaining the status quo by doing nothing is not likely to shift the culture toward one that embraces scholarly activity because it has not significantly done that in the four years since the original implementation. Anticipated and unanticipated impacts and downstream costs could arise because of this approach. It may harm the inflow of public and private research grants, for example, as nobody will be focused on such aspects. While grants are not “revenue” in a strict,

fiscal sense, they can offset expenses such as instructor salaries, and pay for student-researchers, equipment, and other costs.

Further harm may result from not having a centralized source of “all-things-research” at the Institute. Deans, academic chairs, and faculty who have a myriad of responsibilities daily will now shoulder the work of adding the intricacies of research to their roles, in lieu of an integrated body offering specialized resources, supports, policies, and information. Inconsistencies in practices and procedures may result as each school controls and evolves scholarly activity in their own, unique ways.

Nonetheless, this solution is a viable one if senior leaders see the current scholarly activity status quo as acceptable.

Solution 2: Scholarly Activity Grants

Proposed Solution 2 is a radical departure from existing thinking, but one that has a proven record of accomplishment elsewhere.

In 2007, the Institute for the Study of Teaching and Learning in the Disciplines (ISTLD) at Simon Fraser University (SFU) launched an initiative known as Teaching + Learning Development Grants (TDLG) (Simon Fraser University, 2018). The program provides faculty grants of up to \$6,000 that are “intended to recognize teaching development as a scholarly activity and to stimulate faculty-led investigation of new or innovative teaching and learning practices” (para. 1). Within defined parameters, grant applicants are free to research what they wish, provided they follow the guidelines and requirements outlined for application submissions.

These are:

1. Submit a proposal.
2. Attend a workshop about research question development.
3. Receive funding.
4. Receive assistance as necessary about any aspect of research.

5. Conduct research.
6. Link and connect with other TDLG recipients.
7. Informally and formally share findings.

The TDLG program has seen remarkable success with the completion of 278 faculty projects since 2007 (Simon Fraser University, 2018). In the 2016-17 academic year alone, outputs included:

- the commencement of 48 projects;
- the completion of 44 projects;
- the dissemination and publication of 88 projects begun in prior years;
- the involvement of 4,000 – 5,000 students;
- the involvement of 108 faculty members.

SFU found that key to the success of this program was placing the onus for initiation of scholarly activity projects on faculty, leveraging human creativity, curiosity, and ingenuity. The program defines clear and attainable expectations and offers supports in order for faculty to receive the funding. As measured by scholarly quality and output, the institute has experienced great success despite the absence of any mandated requirement for faculty to participate. Fully 20% of all SFU faculty have participated voluntarily, on their own time, since the inception of the program.

Resources needed. This solution would need considerable resourcing at the Institution at the outset, and on an ongoing basis, to be successful and sustainable.

Time. Scholarly activity grants could be operational in an estimated six months, with a dedicated person to steer the designing and implementation of this solution, and by modifying existing supports and systems.

From a faculty loading perspective, those teaching in degree programs would be able to use their 30% scholarly load, with the understanding that grant money would come with the stipulation that further time spent on projects may be necessary and outside of required work

duties and time. For faculty outside of degree programs, and others wishing to participate in the program, time spent researching would fall outside of their normal duties, and be accomplished “off the sides of their desks.”

Human resources. One additional, dedicated employee would be able to institute a scholarly activity grants program, as well as maintaining it on an ongoing basis. This person would coordinate institutional research resources already in place in the Department of Applied Research, yet underutilized at present due to the low output levels of scholarly activity currently.

Fiscal resources. The prospect of funding multiple projects where no such funding exists presently is the largest hurdle for this solution. SFU caps TDLG grants each year at approximately \$180,000, or 30 projects, depending on the funding levels of each. Grants of \$2,000 are a feasible starting point for this institute in lieu of SFU’s \$6,000 grants. In many cases, funding may not be necessary at all. Once established, the Institute might consider committing to, for example, 20 grants per year totaling \$40,000. Government and private funding could be explored to offset costs or to increase the number of grants. At the time of writing, both the provincial and federal governments have recently increased funding for research, based on a report that recommends implementation of a multi-year agenda to increase research grant funding considerably (Canada's Fundamental Science Review, 2018; Government of Canada, 2018)

Information. All TDLG information, documentation, forms, and metrics are freely available on their website. SFU has expressed interest in sharing their learnings about the program and verbally offered the Institute informational support.

Technological resources. No additional technological resources are required with this solution.

Benefits and disadvantages. Solution 2 is the most expensive solution proposed.

Additionally, the collective agreement would need to be re-examined as this solution alters the parameters of faculty job expectations. However, if the success of Simon Fraser University is any indication, this option holds the most promise in helping rapidly increase scholarly activity across the entire institute, within and beyond degree programs. It would also help to advance multiple institutional strategic goals simultaneously—becoming a global leader in applied education, sustainable growth, student success, employee success, applied education innovation, and partnerships—all areas enriched by scholarly activity. By embracing the attributes of distributed leadership, as outlined in Chapter 1, scholarly activity grants would shift the institutional culture by helping to create an environment favourable to human initiative, spurring research activity.

It is acknowledged that the TDLG program at SFU operates in a university setting, with university faculty who are generally more committed to and better versed in research practices than polytechnic instructors are. Nonetheless, by providing additional and perhaps more elementary supports, this solution remains a viable answer to the PoP.

Solution 3: A Centralized Research Hub

In order to realize synergies and maximize all aspects of applied research, Solution 3 recommends that all institutional research “live” in a centralized Research Hub. This solution would require a significant shift in the current thinking and commitment to scholarly activity.

The Institute has developed considerable expertise, industry credibility, and widespread notoriety with its Department of Applied Research, but this department’s ambitions differ from those of degree scholarly activity. Their mission of collaborating with outside entities to commercialize novel technologies contrasts that of degree program scholarly activity, where

goals centre on the Scholarship of Teaching and Learning inspired outcomes, or industry-specific research themes related to degree topics. Despite their differences, researchers in both Applied Research and the Academic Division follow the same, scientifically established research logic model of inputs, activities, outputs, outcomes, and impacts. Having the Department of Applied Research and scholarly activity work in parallel would result in effective synergies in the areas of resourcing, supports, and the need to network and be-networked with fellow researchers. Further, this would provide clarity for those wishing to engage in research internally, or liaise with the Institute from the outside. These potential, external partners do not generally know enough to differentiate between commercially driven applied research and faculty-driven scholarly activity—it is all “research” to the uninitiated.

Comparable post-secondary institutes have realized such synergies by having a single Research Hub, as evidenced by their single internet links encompassing all research activities (e.g., <https://www.bcit.ca/>, <https://www.humber.ca/research/>, <https://www.rrc.ca/research/>, <http://www.nait.ca/52497>). As stated in Chapter 1, virtually all academic chairs and faculty at the Institute are research novices. A single, digital point of entry into the intricacies of the scholarly world would quickly move scholarly activity forward and likely inspire non-researchers to involve themselves—as the Vice President Academic has envisioned.

Resources needed. Scholarly activity implementation began at the Institute in 2015. As such, most resources are already in place.

Time. Implementation of this solution would be immediate, with the hiring of one person (see *Human resources*, below).

Human resources. At the outset, a need exists for one person to centralize and streamline scholarly activity procedures, practices, and norms for degree program researchers—a Scholarly

Activity Coordinator. This person should be centrally located in the Department of Applied Research to make him/her accessible to and for the institution.

Fiscal resources. Expenses for this solution would include a salary and benefits for the Coordinator, in the \$80k to \$110k range, as well as the negligible costs associated with setting up a workspace.

Information. The original implementation of scholarly activity occurred four years ago. Information related to policies, procedures, and resources already exist and are in place.

Technological resources. Aside from workspace arrangements for the Coordinator, there would be no immediate need for additional technology to implement this solution.

Benefits and disadvantages. The benefit of the centralized hub approach would be the establishment of a champion for scholarly activity, providing a single source of information and truth for all stakeholders, internal and external. Specific benefits would include:

Administration.

- Ensuring that connections among program quality, faculty development, industry needs, and student success remain relevant and strong.
- Centralization of tracking of processes, procedures, and reports across all five campuses.
- Organization and execution of peer review panels for all scholarly projects.
- Administration of student participation in faculty research: non-disclosure agreements, IP agreements, ethics training, and contributions to student co-curricular records.
- Reestablishment and leadership of the Scholarly Activity Steering Committee and Degree Academic Chair Community of Practice.
- Partnering with the library in cataloguing and externally promoting completed scholarly projects.
- Establishment and maintenance of academic partnerships with other post-secondary institutes for joint scholarly ventures.
- Maintaining and communicating lists of professional membership, publication, and dissemination resources (e.g., academic conference information, professional association contacts, journal and newsletter sources, networking linkages).

Supports and resourcing.

- Training and support for academic chairs, faculty, and staff.
- Policy creation, implementation, and evolution.
- Coordination of internal resources: Research Ethics Board, grant writers, library, Centre for Learning & Teaching.
- Facilitation and evolution of degree-specific research themes.
- Centralization of researcher contact information, pairing, and cross-pollination between schools, departments, projects, and partner institutes.
- Centralization of outreach and proposals to industry partners for research collaborations.
- Support and resourcing of non-degree faculty/staff research projects.
- Coordination and support of student research and capstone projects.
- Creation and maintenance of research links and supports on the Institute's web and intranet sites.

Grant funding.

- Administration and control of faculty grant applications and usage tracking.
- Sourcing of federal, provincial, and private research grants and funding.
- Development of a relationship with the National Research Council Canada (NRCC), the Industrial Research Assistance Program (IRAP), and others to leverage advisory services, funding, networking, student employment, and possible commercialization of scholarly activity.
- Support for not-for-profit grants, arts councils, foundations, etc. that align with fine arts faculty scholarly projects.

Ministry of Advanced Education reporting.

- Centralization of all scholarly activity reporting data.
- Compilation, writing, and submission of the annual report to the Ministry of Advanced Education.
- Growing and leading the evolution of polytechnic applied scholarly activity nationally and internationally.

Promotion and outreach.

- Provision of a single point of contact for the Communications and Marketing department.
- Promotion and marketing of faculty researchers and projects online and in print.
- Provision of a single point of contact for the Alumni Department to help attract industry projects and funding.
- Provision of a single point of contact for all schools and departments to identify industry research opportunities.

As scholarly activity continued, grew, and evolved, centralization would provide a means of enacting further changes, ensuring standardization and consistency in practices, policies, and

the provision of supports and resources. However, it would entail some financial impact—the fiscal return on this investment is intangible at this point but would certainly be tracked longitudinally.

Recommended Solution

In order to close the gap between the realities of scholarly activity and the need for change leadership to develop a culture that embraces it, an amalgam of solutions 2 (Grant Funding) and 3 (Research Hub) is proposed.

First, the creation of a centralized Research Hub would unite institutional research. With a relatively minimal outlay of resources, this would immediately begin to standardize practices, provide the supports that academic chairs and faculty need, and attain consistency in all aspects of scholarly activity. Next would be the incentivizing of scholarly activity across the Institute with research funding that asks for only a few simple steps of procedural compliance. This would act as a catalyst for advancing the strategic plan as it related to scholarly activity, and is explored in more depth in Chapter 3.

Leadership Approaches to Change

As discussed in Chapter 1, the Institute is hierarchical at the executive level. This transactional, path-goal approach to leadership (House, 1971; Northouse, 2016) clarifies paths of responsibility and reporting, but is unlikely to achieve change at the academic chair and faculty level. The original implementation of scholarly activity was approached in this way and has not achieved the degree of success desired, as measured by degree program research quality and quantity.

This section revisits two previously discussed leadership theories that will support the OIP—transformational leadership and distributed leadership—and outlines how each is an integral part of the proposed solution.

Transformational Leadership

Due to the original scholarly activity implementation in 2015, adequate systems and structures have been created and established. This is the result of a *managerial* approach that strives to make order out of complexity by instituting systems that get people moving in the same change direction. What the proposed solution requires is a *leadership* approach that helps align players with a common cause and helps them cope with change (Kotter, 2007). The creation of a Research Hub would improve the awareness, familiarity, and availability of the systems and structures. However, if the leadership approach does not align people culturally, the OIP is likely to fail.

Culture, or the shared beliefs, values, norms, and traditions of academic chairs and faculty, is dynamic and transmitted between group members (Gudykunst & Ting-Toomey, 1988). Transformational leadership can help to shift the culture among group members so that they are transmitting a new script based on new beliefs about the individual and common good of scholarly activity, rather than a script that sees it as simply an inconvenience and extra work. To do this, the communication of a clear vision of change helps set the stage for an empowering of stakeholders whereby they rise to meet higher standards (Northouse, 2016). This transformational approach addresses and emphasizes the intrinsic motivations of followers, whereas the approach until now has been to develop them simply as process-compliant new scholars, an approach that focuses on extrinsic motivations. Transformational leadership asks that change leaders build personal connections and strong relationships in order to be able to

adjust to the intrinsic motivations of followers, instead of merely creating systems and procedures and expecting compliance. They do this by exemplifying moral behaviours while continually and constantly working towards the positive advancement of their teams. Further, this approach is not entirely dependent on leaders enacting it alone. Once set in motion and exemplified through vision and personality, leaders and followers alike help each other rise to new levels of morality and motivation (Burns & Rechy, 2004). Faculty are already aligned with the aims of scholarly activity if they are motivated by their own professional development, advancements in their industry specializations, improving the courses they teach, and the success of their students. Tapping into faculty emotions, values, ethics, and long-term goals to elevate levels of intrinsic motivation allows stakeholders to realize that their personal goals likely align with the goals of scholarly activity already. This requires that leaders honestly care about their followers and their individualized desires and professional development and can lead to challenged, empowered team members who are dedicated high performers in the organization (Riggio, 2009). When leaders are successful with a transformational approach, Bass (1990) believes that the impact on followers itself is the very definition of such success. Achieving this alignment may well serve to transform the culture more than simply instituting policies and procedures (Northouse, 2016).

Distributed Leadership

The Academic Division at the Institute exemplifies a distributed organization, one that will prove beneficial for the proposed OIP solution. In contrast to norms in the private sector it serves, the organization's culture of collegial governance and distributed leadership is pervasive. Academic chairs, faculty, and administrators alike participate on committees, in policy creation, and experience considerable creative freedoms in their daily lives. In classrooms, faculty operate

relatively autonomously in their discipline-specific roles because, in many cases, faculty have themselves produced the “product” of education—curriculum and the ways it is delivered.

Though the division is structured as a hierarchy, decision-making is shared through the delegation of responsibilities and empowerment of team members in much the same way as community of practice. That is, the division’s culture is one of a joint enterprise of mutually engaged participants (Wenger, 1998). With the exception of personnel and budgetary decisions, operational, policy, and programming decisions happen in committees comprised of players from all levels. As a result, outcomes are exemplifications of what matters most to the collective, given the obvious parameters of post-secondary governance in the province. Decisions and directions are *distributed* in a way that encourages autonomy, creativity, and innovative thinking (Harvey, Jones, Lefoe, & Ryland, 2012). In modern parlance, leadership is *crowdsourced*.

A distributed leadership approach to the proposed solution aligns with the tenets of transformational leadership in how it moves beyond organizing people, to aligning them with a common purpose (Kotter, 2007). Once a clear vision has been communicated and systems are in place, degree academic chairs and faculty will feel empowered to advance scholarly pursuits, secure in the knowledge that they are acting within established parameters, yet free to innovate. Alignment between the goals of scholarly activity and the personal/professional goals of chairs and faculty is the catalyst that will drive leadership at all levels of the Academic Division. This is the point where a culture that embraces scholarly activity ignites.

Leadership Ethics and Organizational Change Issues

It befits higher education change leaders to operate ethically. In considering the importance of ethics to leadership, Northouse (2016) believes that leaders bear more responsibility for recognizing how their change actions affect lives because they are in the

position of power and control over followers. The Institute places great emphasis on ethics, requiring that all employees complete ethics training and exemplify its core ethical principles of fairness, integrity, respect, safety, and transparency. These qualities represent a universal view of ethics, an important distinction in any discussion where the question of exactly whose ethics to incorporate can arise (Kezar, 2014).

Incorporating ethical theory helps guide OIP decision-making about what is morally right or wrong in any given situation. It can also help mitigate resistance and cynicism about change, two possible indicators of dubious ethical practices (Kezar, 2014). Actors in change can often accept disagreements and recover from them, but they are unlikely to forgive ethical transgressions (Cawsey et al., 2016). Unethical processes can exacerbate resistance and skepticism about the change, hindering progress (Kezar, 2014).

Northouse (2016), citing Aristotle, provides a blueprint and starting point for ethical leadership with five principles:

1. Respect others.
2. Serve others.
3. Show justice.
4. Manifest honesty.
5. Build community.

Below is a discussion of these five ethics principles in the context of the OIP.

Respect Others

Beauchamp and Bowie (1988) believe that “Persons must be treated as having their own autonomously established goals and must never be treated purely as the means to another’s personal goals” (p. 37). Leaders must recognize the inherent human value of followers and listen to their ideas regarding change initiatives. In nurturing followers’ self-confidence and self-worth in this way, the organization has an increased opportunity of arriving at solutions that are

broader, more diverse, and superior than leaders are able to devise alone. Respect for others means that work is a shared effort, a central component of distributed leadership theory.

Serve Others

Serving others invokes the transformational leadership attributes of *inspirational motivation, idealized influence, individualized consideration, and intellectual stimulation* (Avolio & Bass, 1993). OIP leaders must communicate an optimistic vision of change beyond their own self-interests, and articulate the benefits of scholarly activity (inspirational motivation). By exemplifying role model behaviours of moral and ethical conduct (idealized influence), leaders will have set the stage for personal interactions that help them understand followers' talents, interests, and needs (individualized consideration). Leaders will then be able to support and collaborate with the Institute's scholars in a way that encourages innovation and autonomy (intellectual stimulation).

Show Justice

Ethical leaders prioritize the equal treatment of their followers (Northouse, 2016). For faculty in degree programs, scholarly activity is a mandatory requirement of employment. Thus, there is an even distribution of expectations, supports, and resources among degree faculty. However, the distribution of more limited resources and rewards (e.g., research grants, expert assistance in specific areas, and media coverage for exceptional projects) can be unequal due to limits, scarcity, and priorities. This can be problematic and requires leaders to establish clear rules for resource allocation (Northouse, 2016). To this end, Beauchamp and Bowie (1988) outlined their principles of distributive justice, or the socially just allocation of goods, that can help to define perceived fairness in the distribution of rewards. When resources are not available to all, leaders may still achieve justice if they clarify to stakeholders that distribution hinges on

individual need, individual effort, societal contribution, performance, or a person's rights (Beauchamp & Bowie, 1988). In these cases, distribution must begin with the assumption that all change actors started with an equal share of resources and opportunity to benefit.

Manifest Honesty

Perhaps none of Northouse's five ethical principles appears more obviously true than the one citing the importance of honesty. When we reflect on the inverse of honesty, *dishonesty*, we realize that leaders who misrepresent the truth risk sacrificing their colleagues' trust and their relationships with them (Northouse, 2016). Transformative and distributed leadership cannot thrive without strong, trusting relationships. In an environment where leaders are known to be dishonest, collaboration ceases and the leader-follower relationship is reduced to a transactional one, rather than one that is cooperative and respectful.

While it is sometimes necessary for leaders to withhold information due to "organizational constraints that prevent leaders from disclosing information to followers" (Northouse, 2016, p. 346), there is a distinction between non-disclosure and the intentional withholding of key information. For example, it is difficult to imagine that prior leadership in the Institute's Academic Division did not foresee conflict with the faculty association several years ago when they anticipated the implementation of the scholarly activity mandate in degree programs. The collective agreement made no mention of scholarly activity prior to 2018. Scholarly activity does not fit clearly into the agreement's definitions of "class contact hours" nor "assignable work" that includes evaluation, supervision, consultation, preparation, course updating and maintenance, and other related activities. Leadership may have decided that scholarly activity would fall under "related activities." However, with up to 30% of degree faculty time devoted to this new job requirement, leadership should have anticipated the union's

inevitable pushback. If the OIP is to succeed through the nurturing of trust, collegiality, and the mitigating of resistance, omissions of this nature cannot happen on the part of leaders or followers moving forward, intentionally or otherwise

Build Community

Ethical leaders believe in the common good that results from community-building (Northouse, 2016), in contrast to the “them vs us” condition prevalent since the introduction of scholarly activity in 2015. If institutional leadership and faculty are to be equal and willing participants in the development of a culture that embraces scholarly activity and all of its benefits, a community needs to form. Transformational leadership inspires groups to move toward a shared, mutually beneficial path. Burns (1978) believes that a shared leader-follower relationship changes both parties for the better as long as leaders do not control the process—again, a hallmark of distributed leadership.

Kezar (2014) states that 70% of change initiatives fall short and that the body of organizational change research points to a strong correlation between failure and a lack of ethical considerations. Too often, a culture of transactional leadership ignores key ethical considerations and opportunities for community buy-in, invariably resulting in stakeholder resistance and distrust. Kidder (1995) uses the analogy of *ethics fitness*, noting that organizations cannot simply exercise ethics in select situations and expect to be “fit”. Rather, they must persist in attaining continuous ethical fitness by exemplifying ethical practices every day as a part of their culture, if they want to have credibility.

Conclusion

This chapter has argued that a centralized Research Hub combined with the incentivizing aspects of scholarly activity grants would prove effective in solving the problem of practice.

Supported by the Change Path Model (Cawsey et al., 2016) and Prosci's ADKAR model of change management (2016), the proposed solution addresses the deeper, second order changes necessary in keeping with cultural and social cognition theories of higher education change (Kezar, 2014). Both change models are compatible with the transformational and distributed leadership approaches already present at the Institute and key to the success of the proposed solution. Additionally, a vision for an ethical partnership must emerge from the OIP on the part of both leaders and followers, one that does not exclude those who show resistance in either group. This partnership would incorporate steps that include community participation and input, open information sharing and communication, organizational justice, and the recognition of resistance as a necessary check and balance on ill-advised decisions (Kezar, 2014).

Chapter 3 will explore a plan for communicating, implementing, and monitoring and evaluating the proposed solution.

Chapter 3: Implementation, Communication, and Evaluation

The previous two chapters provided a detailed account of the organizational context, analysis, and potential solutions to the Problem of Practice (PoP): *There is a gap between the necessity for scholarly activity at the Institute and the need for change leadership to develop a culture that embraces it.* The present state is one that saw the 2015 implementation of scholarly activity processes, procedures, practices, and norms in response to the offering of the Institution's first two baccalaureate degrees. This necessitated the creation of new policies, a new definition of polytechnic scholarly activity (as opposed to a university), new committees, and the forms and templates to operationalize, record, and report faculty research.

This Organizational Improvement Plan (OIP) focuses on creating a Research Hub that operates in parallel with the existing Department of Applied Research. Combined with modest funding incentives, this Research Hub would spur growth of an applied teaching + research culture. A detailed change implementation plan, communication plan, and monitoring and evaluation plan emerge in this chapter. Finally, a discussion of next steps and future considerations concludes the OIP.

Change Implementation Plan

This section outlines goals and a framework for leading the change, with a focus on managing this important transition.

Goals and Priorities of the Planned Change

As outlined in Chapter 2, the goal of this OIP is to develop a plan that employs distributed and transformational leadership strategies that lead to the creation of a Research Hub and Teaching and Learning Development Grants. This modification to the organization's structure would provide immediate, easy-to access administration and supports for academic

chairs, faculty, and others engaged in institutional scholarly activity. The solution fits within the overall organizational strategy and institutional vision of a future state in the following ways:

- It aligns the offering of baccalaureate degrees with the benefits of ever-improving and ever-evolving curricula.
- It enhances external industry partnerships, maintaining program relevancy and sustainable growth.
- It promotes the professional development of faculty in their disciplines.
- It ensures applied education growth and innovation in degree program sector knowledge.
- It allows for greater collaboration among all actors involved in scholarly activity.
- It helps position the Institute as a global leader in applied education.
- It increases the likelihood of student success benefitting individuals, the province, and beyond.
- It allows for centralized monitoring and evaluation of all institutional research.
- It creates a unified voice for all communications regarding institutional research.
- It stimulates/motivates other faculty and students to get involved in applied research.

Organizational Structure

Minor organizational restructuring is required with the proposed solution. The existing, partial organizational chart presented in Chapter 1 (see page 11) is shown here in revised form as Figure 6. It highlights a new path of responsibility for scholarly activity. The most significant component of the restructure would be the transferring of responsibility for faculty scholarly activity at the executive level from the Vice President Academic to the Vice President Corporate Development and Applied Research. Faculty would continue to report to their academic chair, but be able to access the supports and services of the Scholarly Activity Coordinator in the Research Hub.

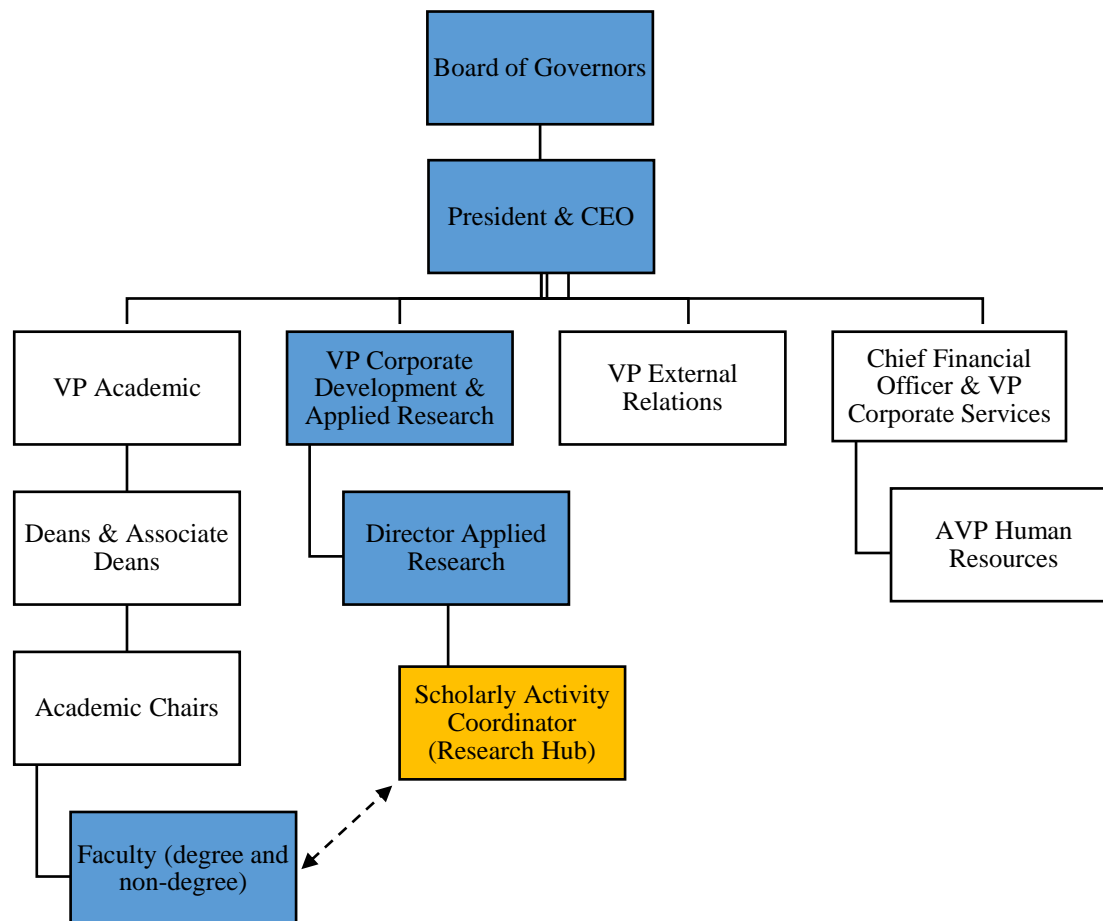


Figure 6. Revised Organizational Chart.

Transition Management

The Prosci/ADKAR (2016) three-phase change leadership methodology will be employed: (1) preparing for change, (2) managing change, and (3) reinforcing change. This approach anticipates and addresses such factors as understanding stakeholder reactions and resistance, engaging and empowering others, supports and other resources, implementation issues, goals, and limitations.

While the Prosci model outlines the process dimension of change, the acronym “ADKAR” is a reminder that there is a people/cultural dimension of change to consider. This is in keeping with Lewin’s Equation (1943) where stakeholder behaviour is a result of both

personality and context: $B = f(P,S)$. That is, change team members should anticipate inconsistent stakeholder behaviours as a result of individual personalities reacting to fluid situations. To mitigate this, change activities through all Prosci phases must ensure that all stakeholders transition sequentially from the ADKAR components of: (a) an *Awareness* of the change, to (b) a *Desire* to support and participate in the change, to (c) *Knowledge* of how to change, to (d) possessing *Abilities* to implement the change, and finally to (e) how to *Reinforce* and sustain the change.

Preparing for change. This step formulates a change management strategy based on aspects of the organizational assessment and change characteristics identified in Chapters 1 and 2. The present leadership context, change readiness, change theory, and the historical context of the PoP are considered and factored into the strategy.

Scholarly Activity Implementation (SAI) team. The team leading the transition would be comprised of key stakeholders from the various areas of the organization. This group would follow a non-hierarchical structure in keeping with the characteristics of distributed and transformational leadership theories that have proven successful at the Institute. The recommended composition of this key, ten-person team would be

- a newly-hired Scholarly Activity Coordinator;
- the individual responsible for compiling the annual scholarly activity report for the Ministry of Advanced Education;
- 1 dean or associate dean from each of the 2 existing degree programs and the 1 pending degree program to be introduced in 2019;
- 3 academic chairs from degree programs;
- 2 faculty from degree programs.

Conspicuously absent from the SAI team are members of senior leadership. As the change drivers, the SAI team will recruit senior leadership to be sponsors of the change.

Preparing change sponsors. As important as the SAI team is, active and visible sponsor participation is the number one predictor of change success (Prosci, 2016). While the SAI team decides the direction, activities, and communications about the change, it is the sponsors who ultimately deliver these actions by building coalitions and communicating directly with stakeholders until the change gains momentum. In effect, the SAI team must act as an executive assistant to the sponsors, dictating schedules, events, and how to facilitate successful outcomes with stakeholders.

Sponsors are considered either primary or secondary. Primary sponsors in this case are the Vice President Academic and the Vice President Corporate Development and Applied Research, each of whom has a vested interest in degree program research.

It cannot be assumed that primary sponsors are knowledgeable about the attributes, definitions, and workings of scholarly activity at the Institute to date. For this reason, they must be pre-evaluated by the SAI team as being in one of three categories (Prosci, 2016):

- Green – A supporter of the change with a high degree of understanding about scholarly activity.
- Yellow – A supporter of the change with a moderate level of understanding about scholarly activity.
- Red – In opposition to the change, or has demonstrated a low level of understanding about scholarly activity.

A sponsor's score using this simple metric determines how extensively the SAI team will need to work with them and coach them to ensure they are "green" before they are permitted to participate as a sponsor who disseminates key information about the change.

Secondary sponsors include SAI team members and all institutional leaders considered direct stakeholders in the change who will be expected to deliver accurate and consistent messaging about the change (e.g., deans, associate deans, academic chairs, and human resources

personnel, whether associated with degree programs or not). These team members, leaders, and stakeholders must also be coached before participating as active, visible sponsors themselves.

Managing change. This step involves the development of change management plans and their implementation. It addresses short, medium, and long-term goals along the path to achieving the desired future state, incorporating the necessary components of communications, the primary sponsor roadmap, training/coaching, and resistance management.

Change management plan. At this point of the OIP, the Scholarly Activity Implementation (SAI) team and primary/secondary sponsors have been identified, and the communication plan is in place.

In order to develop a more specific and customized change management plan, the SAI team must seek the perspectives of stakeholders to help determine a starting point for change. As Chapter 1 explains, employees impacted by the initial scholarly activity implementation in 2015 may have accepted this new responsibility, be resistant to it, or may have expressed ambivalence. Chapter 2's Critical Organizational Analysis introduced Cawsey et al.'s four-stage Change Path Model (2016) as a method of analyzing the gap between the present state and the desired future state in relation to the PoP. Stage 2 of the model prescribes that perspectives of all stakeholders need to be known. To accomplish this, the Scholarly Activity Coordinator will conduct an anonymous survey to determine stakeholder awareness, desire, knowledge, and ability to engage with the change. The survey will target:

- senior leaders connected to degree programs;
- SAI team members;
- academic chairs in degree programs;
- faculty in degree programs;
- human resources employees involved in the recruitment, retention, and professional development of degree academic chairs and faculty;
- anyone else connected to the original scholarly activity implementation.

Primary sponsor roadmap. Once the SAI team has trained and coached the two primary sponsors to “green status” and they are willing and knowledgeable proponents of the change, a roadmap will be created to methodically plan their messaging across the Institute. This roadmap has a cascading element to it. That is, messaging of the communication plan’s sponsor script begins at the highest levels of management and gradually cascades down the organizational chart as successive stakeholders become willing and knowledgeable themselves. This step represents the beginning of the ADKAR model in that it will build stakeholder *awareness* of the change, and a *desire* to participate. Table 1 is an example of this roadmap.

Table 1

Primary Sponsor Roadmap

Target Group	Activity	Date/Time	Purpose
Executive	Present key messaging at: <ul style="list-style-type: none"> ✓ Executive Team meeting. ✓ Board of Governors meeting. 	Month 1	<ul style="list-style-type: none"> ✓ To test high-level script for key influencers. ✓ To create awareness at the highest levels.
Deans’ Council	Present key messaging at: <ul style="list-style-type: none"> ✓ Deans’ Council meeting. 	Month 1	<ul style="list-style-type: none"> ✓ To create awareness of the change initiative. ✓ To begin to turn deans “green” as secondary sponsors. ✓ To link scholarly activity to school strategic objectives.
Managers	Present key messaging at: <ul style="list-style-type: none"> ✓ Management Council meeting. ✓ Other leadership meetings. 	Month 2	<ul style="list-style-type: none"> ✓ To create awareness/desire. ✓ To begin to turn managers “green” as secondary sponsors.
Employees	Present key messaging at: <ul style="list-style-type: none"> ✓ Town Hall meetings. ✓ Faculty meetings. ✓ Publish an interview in the campus newspaper. 	Month 3 forward	<ul style="list-style-type: none"> ✓ To create awareness/desire. ✓ To mitigate early resistance.

Training and coaching. As institutional awareness and desire to change increases through execution of the sponsor roadmap, combined with insights provided by the survey, the *knowledge* and *ability* aspects of the ADKAR model are then addressed.

Training workshops will be scheduled that address knowledge gaps of degree academic chair and faculty members. Workshops will focus on scholarly activity procedures, navigating and aligning research to the scientific logic model, understanding the roles and responsibilities of scholars, techniques for integrating with industry and academia to disseminate research, and many others. At this point, the Research Hub's Scholarly Activity Coordinator will begin to encourage and facilitate the establishment of communities of practice and match research-savvy mentors with research-challenged colleagues, mitigating faculty isolation (Lieberman, 1992). Coaching opportunities would include one-on-one stakeholder consultations that increase knowledge and skills related to research and career progression, balancing teaching and researching workloads, and assistance for degree academic chairs who must learn to lead their faculty in scholarly activity pursuits, leveraging the concept of distributed change leadership.

With the launch of the training and coaching components of the OIP, it is anticipated that Bolman and Deal's (2013) four frames of organizational change (introduced in Chapter 1) will catalyze positive transformation in the areas of the political, symbolic, human resources, and structural aspects. As examples:

- The *political* power issues that began with the inauspicious introduction of the scholarly activity mandate can make way for more distributed and transformational approaches.
- Positive and negative *symbols* of the original implementation can be addressed, shattering myths and creating a new culture of truth.
- *Human resources* staff will be able to understand the nuances of scholarly activity that must be incorporated in new hiring practices.
- A mutual understanding of the *structural* neoliberal benefits of scholarly activity to the Institute on the part of faculty may emerge in parallel with an understanding by leadership of how their decisions affect faculty culture.

Resistance management. As discussed in Chapter 1, resistance to change rarely results from opposition to it. Rather, change players resist because they do not understand the change and its alignment with their worldviews—it is culturally incoherent to them (Kezar, 2014). In my role as Scholarly Activity Implementation Coordinator, I interviewed the original scholarly activity resisters who uniformly stated opinions that reflected their deep concern for the direction of the organization and how it operates, rather than outright opposition to it. Opinions expressed included: concerns about not understanding scholarly activity processes; concerns that the scholarly activity model for polytechnics differs too much from the more familiar university model of research, and why faculty have to do it at all. Though a poor initial approach in 2015 resulted in the current reticence and resistance from some, a positive approach moving forward with the OIP means that further (or new) resistance is not necessarily inevitable (Kezar, 2014).

One of the main goals of the communication plan is to mitigate resistance through frequent and consistent messaging by primary sponsors in an intentional, cascading manner to senior leaders, then deans, then managers, and then employees. At each step along this continuum, new secondary sponsors will be recruited to help disseminate identical messaging. In this way, awareness of the change and a desire for actors to participate in it are continually fostered and nurtured. This messaging, consistently promoted by the SAI team, and combined with the training and coaching aspects of the OIP, may serve to prevent the furtherance of opposition to the scholarly activity mandate and the potential rise of new resistance.

The next section discusses implementation plans and the leveraging of distributed and transformational leadership theories that will help to dispel the possibility of further resistance.

Plan implementation.

As communication and support continue to flow downward from primary and secondary sponsor levels, other activities will be distributed across scholarly activity players at all levels of the organization. Plan implementation will be directed by the new Scholarly Activity Coordinator and fully centralized at the Research Hub. The resources, supports, and administrative activities listed in Chapter 2's "Solution 3: A Centralized Research Hub" will be activated. The creation of a timeline will allow for the gradual, scalable implementation of these numerous initiatives as short, medium, and long-term goals. At the same time, the creation of the program that provides Scholarly Activity Grants would commence, beginning with the consideration of how to go about sustainably funding small research grants, and the processes and procedures for implementing the program. This plan implementation phase is where "A" in ADKAR (Prosci, 2016) happens, as actors at all levels increase their ability to engage in scholarly activity, be they researchers, administrators, or leaders.

Plan to Communicate the Need for Change and the Change Process

A successful communications strategy clearly identifies affected stakeholder groups and creates targeted, key messages to those groups that are appropriate and timed for greatest effect. It uses preferred sponsors, creates two-way dialogue, and uses face-to-face interactions as often as possible. Clear, progressive communication is key in positively influencing all five stages of the ADKAR (Prosci, 2016) change management model.

Building Awareness

In order to build awareness of the change, the initial focus will be on having the coalition of sponsors deliver accurate messaging and scholarly activity definitions at the highest levels of the organization, in accordance with the Primary Sponsor Roadmap. Then, the same messaging

will be used to bring awareness through middle management, faculty, and administrator ranks—the “A” in ADKAR. Throughout, the idea will be to generate energy, engagement, and a desire for change (the “D”) by communicating the underlying business need and the potential for program, professional development, and student success through applied research. The communication plan must develop institute-wide knowledge (“K”) about the scholarly activity framework that has been developed, its tools, and its supports. Additionally, the plan will help foster scholarly abilities and opportunities (“A”) by communicating the availability of workshops, scholarly communities of practice, one-on-one coaching and mentoring, and the personal and institutional processes involved in monitoring progress. It will also reinforce change through the promotion of faculty scholars and their projects as well as recognize, celebrate, and link scholarly activity successes to student success, faculty/staff success, and industry advancements to the rest of the Institute. In light of scholarly activity’s dubious initial launch that sowed confusion and resistance, a clear and well-executed communication plan is vital for broadcasting a single source of truth for information, tools, and resources. Above all, and in order to lend weight and cache to the initiative, the communication plan must align with the higher institutional goals outlined in Chapter 1.

Audiences

The various audiences for the communication plan include those stakeholders described in Chapter 1’s *Organizational Change Readiness* section and include senior leadership, degree program academic chairs and faculty, the marketing department, the faculty association, human resources, and informal scholarly activity communities of practice and champions. That is, those directly affected by, or involved, in the change. However, there will be a widening of the audience with the communication plan. The purpose of the communication plan is not only to

inform those involved with the change, but also to broadcast the message of scholarly activity beyond this audience, to other actors who may be able to accelerate the initiative in yet unforeseen ways.

These additional audiences for the communication plan will include leaders and faculty in non-degree programs, administrators, and all other employees. Eventually, the Research Hub and its supports and resources will be available to all, as originally envisioned by the Vice President Academic, though the Scholarly Activity Grants will not be available beyond degree faculty immediately. As the OIP gains traction, these grants would be accessible to all within two to three years. In this way, the problem of practice of closing the *gap between the necessity for scholarly activity at the Institute and the need for change leadership to develop a culture that embraces it* will expand to create a universal culture of research across the entire enterprise, not just in degree programs.

The communication plan will also target alumni, the student association, industry connections, other post-secondary institutes, media, government, vendors, and the 80+ program advisory committees that serve the Institute's programs. Research and potential ideas for research are endless. Scholarly activity will only realize its full potential by crowd-sourcing ideas, seeking further resources and outside funding, by including students, and by identifying the research needs of the industries served. The communications plan will include a full description of the purpose and roles of the proposed Research Hub, which will serve as the central point of truth, and the contact point for all research inquiries and opportunities.

A new Research Hub link will appear on the Institute's web site and include scholarly activity definitions, frequently asked questions, all administrative documents, and further links for the library, research ethics board, and grant opportunities. The site will also trumpet current

and past research success stories from the faculty and staff ranks, further elevating the status of scholarly activity and encouraging all to connect with the Institute for their research purposes.

Key Messages

In order for the communication plan to be successful, universally agreed-upon messaging must be broadcast consistently. Doing otherwise will harken back to the original implementation and its absent or mixed messaging, bolstering resistance.

The key messages in the communication plan are:

- Scholarly activity is any activity that involves the intentional creation, integration, and/or dissemination of knowledge with a view to informing professional practice, contributing to the state-of-practice within a field and / or affecting the broader external environment.
- Scholarly activity recognizes and incorporates applied teaching, learning, and research.
- Scholarly activity is a requirement of the Ministry of Advanced Education in order to maintain degree-granting status.
- Scholarly activity is an operational and cultural shift and requires alignment and support from all areas of the organization to be successful.
- Scholarly activity keeps the Institute on the leading edge of applied learning, creating opportunities for our students and faculty, and fulfilling our mandate of serving our city, province, country, and world.
- Scholarly activity and applied research moves us forward in the way we think, the ways we teach and learn, and the way in which we collaborate with industry.
- Our instructors are invested in developing themselves, their courses, the craft of teaching and learning, and their industry's practices every day. Scholarly activity formalizes these processes and disseminates them.
- Scholarly activity is an opportunity for all employees—both faculty and staff, and not just those in degree-granting programs.
- Scholarly activity is a key component of the Institute's strategic plan as outlined in Chapter 1. It contributes to our stated core beliefs of excellence, collaboration, innovation, employee success, strong partnerships, and building sustainable growth into all products and processes.

A clear, intentional communication plan at the outset launches the awareness of the change initiative in the right direction. It addresses the suggestions of the Cawsey et al. four-stage Change Path Model (2016), discussed in Chapter 2, of awakening to change, mobilizing, accelerating, and incorporating institutional data to create a vision of scholarly activity that

others can buy into. Additionally, it considers the reality of Lewin's equation (1943) proposed in Chapter 1, where *behaviour* is a function of both *personality* and a given *situation*. One can only influence behaviours and personalities, not change them. However, by defining and disseminating the clear messages missing from the original implementation of scholarly activity, faculty awareness of the change builds, as does their knowledge about the change, and the seeds of desire to participate are planted. This, as much as anything can, will help mitigate the variables of behaviour and personality.

The next section outlines a plan whereby the SAI team may monitor and evaluate change progress, and develop strategies to reinforce the change for sustainability.

Change Process Monitoring and Evaluation

Cawsey et al. (2016) wrote that:

What get measured affects the direction, content, and outcomes achieved by a change initiative. Measurements influence what people pay attention to and what they do. When organizational members see particular quantifications as legitimate, believe their actions will affect the outcomes achieved, and think those actions will positively affect them personally, the motivational impact increases. (p. 340)

This section looks at the role monitoring and evaluation play in leading change.

As interconnected as they are in practice, both monitoring and evaluation have distinct functions. Monitoring involves the tracking of change implementation including activities, processes, outputs, and initial outcomes (Markiewicz & Patrick, 2015). Metrics for monitoring include fixed performance indicators in the form of compliance audits and performance measurement evaluations. These tools indicate where to take corrective actions and where to provide additional process supports. They also indicate where change is successfully taking root as evidenced by stakeholder adoption of new practices. Evaluation on the other hand uses the outputs of monitoring, as well as separate strategies of evaluation, to differentiate tactics that

worked from those that did not work, helping change leaders learn from both. It draws conclusions about the progress of change and its value, and helps to inform the future direction of change. Together, monitoring and evaluation serve to refine Chapter 3's implementation plan by applying metrics and measurements.

The four-stage Change Path Model (Cawsey et al., 2016) culminates in stage-four's Institutionalization phase, where the authors encourage the periodic tracking of change. Rather than waiting until the end of the change process, monitoring and evaluation should be embedded throughout (Cawsey et al., 2016; Markiewicz & Patrick, 2015; Newcomer, Hatry, & Wholey, 2010; United Nations Development Programme, 2009). Feedback mechanisms should gather and examine data in order to diagnose progress and results, inform change leader decisions, promote accountability, and to drive continual learning and improvement (Markiewicz & Patrick, 2015). Lastly, the information generated by monitoring and evaluation provide change leaders with opportunities to celebrate successes in the form of recognition, rewards, and the subsequent reinforcing of the change in participants (Prosci, 2016).

Tracking Change

Two tools will monitor and evaluate progress in the OIP: a *diagnostic control system* that monitors change steps, and a *balanced scorecard* that evaluates changes as they occur (Cawsey et al., 2016).

Refining implementation: a diagnostic control system. A diagnostic control system is a monitoring tool. It not only provides the aforementioned benefits of tracking change activities and providing clues to possible corrective actions and additional support needs, but it also promotes desirable behaviours and discourages counterproductive ones by providing a map for change participants that tells them what will be measured at each stage (Cawsey et al., 2016).

Table 2 outlines the diagnostic control system for the OIP using the following four control points (Simon, 1999):

1. Interactive controls—systems concerned with environmental factors such as threats and opportunities related to the change.
2. Boundary controls—systems that set limits of authority and actions.
3. Cultural controls—mission, vision, and core values of the organization and change actors.
4. Diagnostic and steering controls—systems that measure key performance indicators.

These four control points are used to monitor waypoints along the change continuum: at the start of the change, in the middle of the change, and at the end of the change.

Table 2

Diagnostic Control System

Control Points	Controls at the Start of Change	Controls in the Middle of Change	Controls at the End of Change
Interactive Controls (changing threats and opportunities)	Adequate grant funding Establishment of a Scholarly Activity Coordinator (SAC)	Continuance of funding. Monitoring of SAC job performance.	Ongoing sustainability of funding. SAC job performance evaluation.
Boundary Controls (limits of authority and actions)	Faculty collective agreement compliance Ministry of Advanced Education regulatory compliance	Congruence assessment Congruence assessment	Congruence assessment Congruence assessment
Cultural Controls (cultural alignment)	Alignment with institutional mission, vision, values, purpose, and goals Qualitative metrics on perceived effectiveness of change via surveys and other feedback methods	Congruence assessment One-off feedback opportunities as well as longitudinal studies	Congruence assessment Summative reports compiling qualitative data received
Diagnostic & Steering Controls (key performance indicators)	Establishment of tracking processes and reports that measure employee performance and adoption of new processes Faculty supports are in place	Production and dissemination of tracking and formative reports Subscription rates of faculty supports	Production and dissemination of summative reports Projects are completed and findings disseminated

Note. Adapted from *Organizational Change: An Action-Oriented Toolkit*, p. 351. Copyright 2016 by Sage Publications, Inc.

Gauging progress: a balanced scorecard. A balanced scorecard (Cawsey et al., 2016) is used here as an evaluation tool. Its primary function is to act as a straightforward way of tracking implementation gaps, stakeholder resistance, project roadblocks, and successes to be recognized and celebrated. The scorecard also generates formative and summative assessment data that can support corrective actions by change implementers where necessary. Documenting various aspects of change in this way also helps stakeholders understand the drivers and metrics of change and helps to transfer responsibility for change from change leaders to change implementers, allowing them to assess suppositions, progress, and to alter course when necessary (Cawsey et al., 2016).

Kaplan and Norton (2004) contend that a balanced scorecard should be comprised of four interdependent categories of goals and measures, modified here for the specific context of the OIP: *financial, stakeholder relations, internal processes, and the Institute's learning and growth*. Scoring multiple indicators ensures a 360° impact assessment of change progress and success since implementation. Indicators are categorized as either *lead indicators* whose results are observed soon after implementation, or *lag indicators* whose results become evident later. Figure 9 outlines such a scorecard.

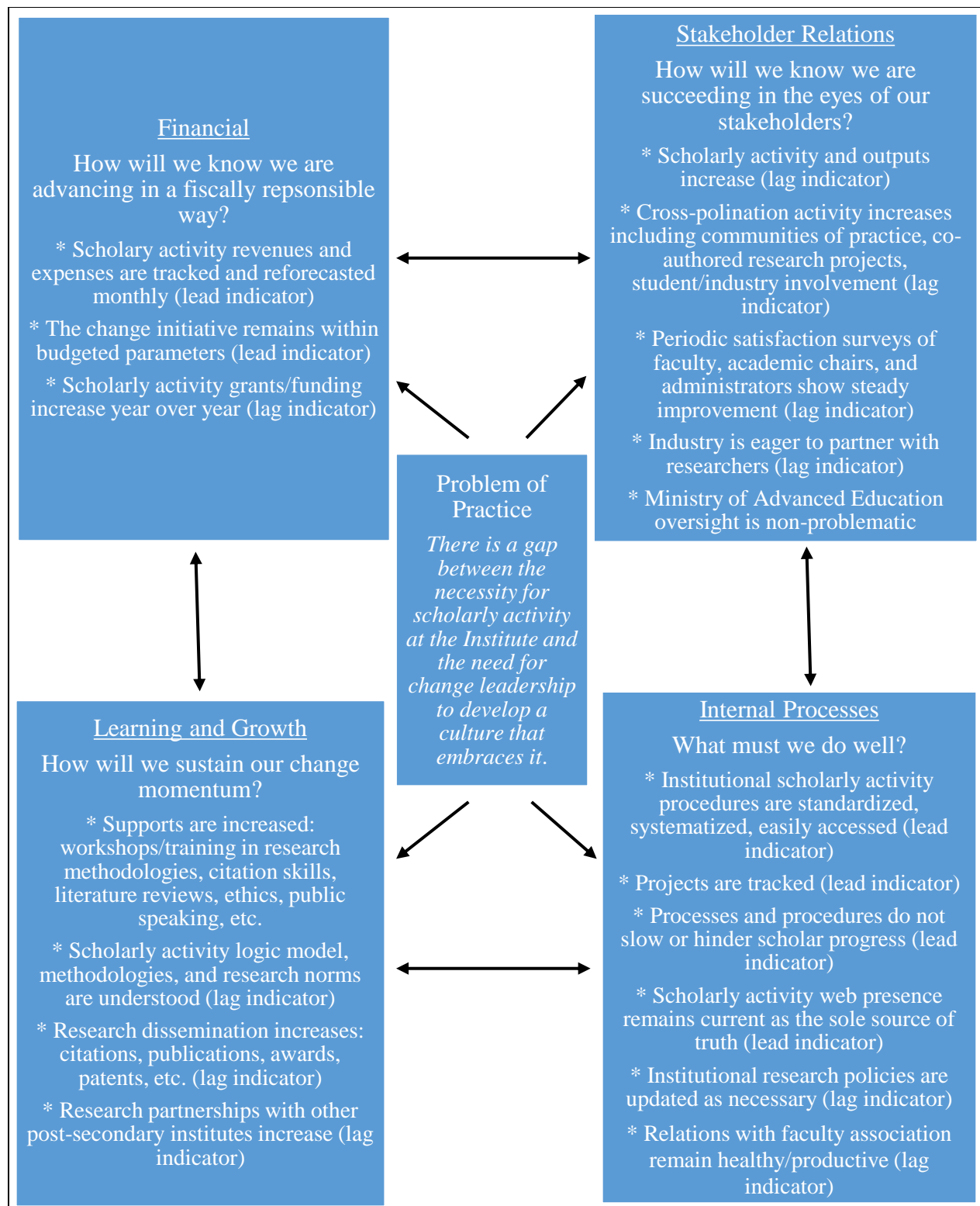


Figure 7. Balanced Scorecard for Change

As progress toward resolution of the problem of practice is realized over time, both lead and lag indicator activities will become standard practice and be removed from the scorecard. As this occurs, the scorecard will not cease to exist. Rather, it will be amended when new situations, ideas, and circumstances arise. While this will help to maintain change momentum, it is also an acknowledgement of the limitations of change monitoring and evaluation. Change implementers can merely predict which indicators, goals, and measures to track and document at the outset of planning. Other previously unforeseen monitoring and evaluation components must be added as the change initiative momentum evolves.

Celebrating and Reinforcing Success

Celebration and reinforcement of successes creates additional enthusiasm about the change and a desire by new actors to participate. Cawsey et al. (2016) believe that “Employees need to believe that they can achieve challenging goals. Measurements that note small steps to the larger goal and measures within an individual’s control will tap into desired motivations” (p. 346). While celebrating KPI-related results is obvious and common, it is not necessary to wait that long in order to realize the benefits of celebrating success. Recognition may follow a person or group’s adoption of new practices, or simply recognize their efforts and buy-in to new ways. In this way, reinforcement (the R in ADKAR) must be embedded throughout the change initiative in the same way as monitoring and evaluation are.

Determination of who should provide reinforcement of change success depends on who is to receive recognition. Generally, recognition is more impactful for groups of employees when it is mid-level managers or primary sponsors of the change who deliver positive messaging and commendations (Prosci, 2016). This means that for maximum positive impact, reinforcement of successful change within scholarly activity groups is best delivered by leaders at the dean and

vice president level. In contrast, individuals react more favourably to reinforcement when their direct supervisor is the messenger, meaning academic chairs are the most effective messengers with their individual faculty members.

More often than not, monitoring and evaluation are seen as summative exercises to be undertaken once all change data becomes available, rather than as formative exercises embedded throughout the change process. The sooner monitoring and evaluation are implemented, the sooner change leaders can leverage emerging results, make tactical adjustments, focus attention on critical areas, and make midcourse adjustments as required.

Conclusion

This chapter has outlined a realistic plan for remediating the problem of practice at the Institute. With minimal organizational restructuring and careful transition management, a new state may be realized—one that embodies a culture that supports and celebrates scholarly activity beyond seeing it as simply a necessary function of offering baccalaureate degrees. The establishment of a Scholarly Activity Implementation Team would lead to the implementation of necessary training and supports to transition scholarly activity players to the new state. The team would also identify and coach change sponsors to deliver an intentional, targeted, and carefully timed communications plan that broadcasts key messages and new information, mitigating resistance in the process. Finally, a monitoring and evaluation plan is proposed to track changes, gauge progress, diagnose problem areas, and create opportunities to positively reinforce staff sentiments about the new state by celebrating successes.

Next Steps and Future Considerations

This Organizational Improvement Plan strives to furnish a multifaceted solution to the following Problem of Practice: *There is a gap between the necessity for scholarly activity at the Institute and the need for change leadership to develop a culture that embraces it.*

If implemented, this OIP may well serve to radically change teaching, learning, and innovation at the Institute. A rich culture of scholarly activity shifts the educational environment from one of transmitting existing knowledge to a state of ever-evolving new knowledge creation that benefits students, faculty, staff, and society. It summons the best in people by allowing and encouraging creativity.

The PoP and this OIP offer a further opportunity beyond the scope of this paper. While applied scholarly activity is not necessarily new to vocational schools, creating a new research model for a school comprised of 50% traditional trades would be. Research is often thought of as situated in professions, but what would the new-knowledge possibilities include if this institute explored uncharted territory in knowledge creation beyond academic areas represented by degree programs? Beyond this OIP, what would the implications for staff, the organization, and society be if the institute imagined a culture of scholarly activity in welding, culinary arts, carpentry, and manufacturing, to name a few?

Above all, it should be remembered that the original implementation of degree-related scholarly activity at this institute was less than successful because an approach was used that valued processes and procedures over the creation of a new culture. Bolman and Deal (2013) believe that “Culture forms the superglue that bonds and organization, unites people, and helps an enterprise accomplish desired ends” (pg. 253).

Twenty-six centuries earlier, the Chinese philosopher Lao Tzu wrote that, “A leader is best when people barely know he exists, when his work is done, his aim fulfilled, they will say: we did it ourselves” (Shinagel, n.d.)

The Institute long ago prepared itself for success with a well-articulated mission, vision, and goals. It possesses the necessary human capital in the form of expert leadership and faculty. All it needs now is to leverage these considerable assets, allowing, assisting, and enabling scholarly activity players themselves to create and foster their own culture of scholarly activity.

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