Articles

Learning Is Change: Creating an Environment for Sustainable Organizational Change in Continuing and Higher Education

Christie Schultz, University of Alberta

Abstract

This article explores the ways in which learning itself is a form of organizational change and, as such, supports organizational readiness for change. The study considers a continuing education unit within a major Canadian university that managed to transform its decentralized and independent student records and administration system (student registration, student financials, student academic records) by merging into the university's central student management system. The technological implementation and transformation took place over 18 months and was enabled by a series of formal committees and working groups, involving a wide range of members across the university's communities and within the continuing education unit. The empirical data consist of responses given during in-depth interviews with a set of

Résumé

Cet article explore comment l'apprentissage devient une forme de changement organisationnel et, de ce fait, comment il appuie la préparation organisationnelle au changement. L'étude analyse une faculté de formation continue au sein d'une université canadienne d'envergure qui a su transformer deux entités autrefois indépendantes et décentralisées, soit son système d'administration et les dossiers de ses étudiants (inscription, situation financière et dossier académique des étudiants), en un système universitaire central de gestion des étudiants. La mise en œuvre et la transformation technologiques ont nécessité 18 mois de travail et ont été possibles grâce à la formation d'une série de comités et de groupes de travail formels, comptant une panoplie de membres provenant des différentes communautés de l'université

participants involved in the change initiative and technology implementation. Managers' reactions to and reflections on organizational change figure prominently in the research findings and discussion. The article aims to show that creating an environment for sustainable organizational change in higher education, and perhaps more generally, is supported by recognizing that learning itself is change, and that workplace learning may therefore help to create organizational readiness for change.

et de sa faculté de la formation continue. Les données empiriques de l'étude sont composées de réponses provenant d'entrevues approfondies avec un groupe de participants impliqués dans le programme de transformation et dans sa mise en œuvre technologique. Les réactions et les réflexions de la direction envers le changement organisationnel sont mises en évidence dans les résultats de la recherche et les discussions afférentes. L'article vise à démontrer que la création d'un milieu favorable au changement organisationnel durable en enseignement supérieur est soutenue par la reconnaissance que l'apprentissage en soi constitue une forme de changement et que l'apprentissage en milieu de travail peut donc contribuer à préparer l'organisation au changement.

Introduction

Management literature has devoted much attention to developing theories and strategies for managing and leading organizational change (By, 2005). Nevertheless, the lived practice and experience of managing change within an individual organization can be expected to both diverge from and merge with the theories associated with organizational change, as well as provide further insights into successful approaches to change management and the environments in which successful and sustainable change management occurs.

This article explores the ways in which learning is a form of organizational change and, as such, supports organizational readiness for change. The article aims to show that creating an environment for sustainable organizational change in higher education, and perhaps more generally, is supported by recognizing that learning itself is change, and that workplace learning may therefore help to create organizational readiness for change.

Context of the Case

This article explores the case of a continuing education unit within a major Canadian university that undertook a significant, technology-driven organizational change. The change initiative was designed to transform a decentralized and independent student records and administration system (student registration, student financials, student academic records) by merging it into the university's central student management system. The reason for the change was compelling: the system that had been in use for more than a decade was nearing the end of its technologically natural life. Originally developed in 2000, the system to be decommissioned was built and maintained in a programming language for which few readily available programmers remained. At the same time that these rare programmers were becoming increasingly expensive, the hardware itself was becoming obsolete, and it was clear that the system would need more than a few small repairs over the next several years.

Perhaps not surprisingly, like many IT systems central to an organization, the system was more than what it appeared on the surface, more than just a way for a student to sign up to take a class. A system like this influences and impacts finances, facilities, instructor relations, and human resources; the design of a system like this affects how nearly every person in the organization performs his or her job. Consequently, any significant change to such a system invariably shapes—and changes—what each person does after a new system is launched. What begins as a "technology issue" emerges as a defining organizational change experience.

The technology and organizational change transformation took place over eighteen months and was enabled by a series of formal committees and working groups, involving a wide breadth of members across the university's communities and within the organizational unit.

Defining the Question

While focusing on this particular case, this article is broadly concerned with a central research question: What are some identifiable key elements that create an environment for sustainable organizational change in continuing and higher education?

This article first presents and analyzes the findings of in-depth interviews conducted with a selection of individuals who were involved in the change process and experience studied. Second, this article seeks to identify limitations of this project and to suggest avenues for further research. And, finally, this article makes the case that continuous learning, in the tradition of continuous improvement, sets the stage for organizational readiness for change; neither learning nor organizational change ceases or can be expected to cease upon the launch or formal implementation of a change; and learning *is* change, and coordinated and continuous workplace learning may create and support an environment within which sustainable organizational change initiatives can occur.

Theoretical Underpinnings

There can be little doubt that fields such as strategic management and organizational analysis have established change management as an important, if not essential, area of study and managerial imperative. And it therefore comes as little surprise that the change management literature, both popular and scholarly, is frequently found in business school curriculum and in the hands of current and aspiring managers.

However, as Rune Todnem By concludes in his critical review of organizational change management theories and approaches (2005), there is a "lack of empirical research on change management within organisations" and therefore a need to "carry out exploratory studies in order to increase the knowledge of organisational change management" (p. 378). He goes on to suggest that "such studies should enable an identification of critical success factors for the management of change" (p. 378).

This research aims to be one such exploratory study. And yet, this study is itself necessarily framed by several current theories and approaches, some of which may be considered more popular than empirical. Still, given the reach of today's change management into popular culture, including the work of the very recognizable John Kotter (1995, 2007) and Rosabeth Moss Kanter (1983, 1985, 1999, 2003), it is worth drawing on these theories and approaches as a means of speaking from and within the established and familiar change management lexicon. Further, given that the approaches promoted by Kanter, Kotter, and others (specifically Nadler & Tushman, 1989; Kotter & Schlesinger, 2008; Orlikowski & Hofman, 1997; Ackerman, 1982) are both practical and popular, it is hard to imagine that their step-by-step processes for managing change are not, intentionally or otherwise, part of the collective imagination of managers, leaders, and others in the setting and organization presented in this study.

To be sure, it should also be acknowledged that a comprehensive literature review of change management theories and research is beyond the scope of this article; however, this study's identified theoretical framework intentionally draws on some of the most frequently cited theories and approaches to change, many of which are likely to be familiar to practising managers. Given this scope limitation, By's critical review of organizational change management theories and approaches has been particularly helpful. A brief further reading of the organizational context in such terms will explain the implied use of these familiar change management theories in the context of the case study.

For this change project, an oversight committee of senior leaders and stakeholders within the university's senior administration was struck. They formed what Kotter labelled a "guiding coalition": "pretty powerful—in terms of titles, information and expertise, reputations, and relationships" (Kotter, 2007, p. 98). The committee's role was, in part and in Kanter's terms, to "shape ideas into a theme that makes a compelling case for the value and direction of change" (Kanter, 2003, pp. 4–5).

In addition, other teams and working groups were formed "outside of the normal hierarchy" and, as such, were able to help to bring together people across the

organization to "help them develop a shared assessment" of what was required and anticipated over the course of the project (Kotter, 2007, p. 98). These teams were a "change management team"; a "project team" tasked with technical implementation; an internal "champions working group"; and an active cross-organizational "working group" of decision-makers at the management level, ultimately responsible for the project outcomes.

The change project itself was also bounded by a clear recognition that people "resist change because they fear they will not be able to develop the new skills and behaviour that will be required of them" (Kotter & Schlesinger, 2008, p. 134); that fear "can slow down even changes ordered by the top" (Kanter, 2003, p. 5); and that "an ongoing change process requires dedicated support over time to adapt both the organization and the technology to changing organizational conditions, use practices, and technological capabilities" (Orlikowski & Hofman, 1997, p. 19). It was further acknowledged that "people within the organization first become aware of the need to change and the dimensions of the change [and then] work to come to grips with this need and to understand what the change is all about" (Nadler & Tushman, 1989, p. 202); and that "each level of the organization engaged in the change takes its own time to understand, accept, integrate, and subsequently own and lead the change" (Nadler & Tushman, 1989, p. 202). Actions that were taken over the course of the project sought to address the above considerations, both directly and indirectly. In other words, this case unfolded in the context of (a) guiding leadership, (b) project teams and change champions, and (c) awareness that change can be challenging owing, in part, to the potential for people to resist change.

The change process for the organization in this study—which may be like many other organizations—will necessarily continue in a more or less perpetual manner, if only because "the changes associated with technology implementations continue an ongoing process rather than an event with an end point after which the organization can expect to return to a reasonably steady state" (Orlikowski & Hofman, 1997, p. 13). Accepting that change processes continue even after periods of significant change, and imagining that we might be able to improve the experience of change, we ought to ask what evidence emerges from this exploratory study about the nature of contemporary, successful, and sustainable organizational change. After all, if we consider the oft-cited failure rate of around 70% of all change initiatives (By, 2005; Beer & Nohria, 2000), adding new evidence to the mix may help propel forward our collective understanding and practice of organizational change.

Methodology

Change, and the experience of it, can be intensely personal. Even what may seem like the most intentional and impersonal organizational change—such as that which is induced by technological implementation—is planned, initiated, implemented,

managed, and experienced by people, individually and collectively. As Blignault and Ritchie (2009) argue for their field of health promotion, "dealing with context is as important as working with the people within the context. Thus, qualitative research is a logical way to augment our developing knowledge of 'what works'" (p. 140). Organizational change experiences similarly connect people and their context. Therefore, recognized as a case study, and seeking "to discover the meanings participants attach to their behaviour, how they interpret situations and what their perspectives are on particular issues" (Woods, 2006, p. 3), a qualitative approach to the study of change is not only possible but also fitting.

Interview Method and Approach

This qualitative study was conducted using a semistructured interview guide (Appendix A) in order to gain an understanding of individuals' personal reflections on their experiences of a specific, shared change initiative that took place in the context of technology implementation. As participants were all connected to an identifiable change initiative, the case in common was used to structure the interviews around the specific identifiable change initiative.

Participant Selection

The study was designed to interview a purposeful sample of five individuals who were involved with a specific recent change project, both internal and external to the immediate organizational unit undergoing the change. Potential interview candidates outlined in the research plan included those in leadership roles or project management roles, external technical leads, front-line or other staff involved with the project, and/or interunit stakeholders. This approach was expected to yield a diverse range of perspectives on a single change initiative for analysis, though it was acknowledged that responses would be contextualized by the individuals' previous experiences.

Five people were formally invited by email to be interviewed in person, approximately six months after the new system was officially launched and implemented. None of the individuals reported to me, nor did I report to any of them. Of the five, two were female and three were male. Each person was purposefully selected in order to contribute a range of perspectives related to the research questions. All participants had a role in the change initiative being studied. Three participants self-identified as internal to the organizational unit undergoing the change; two participants self-identified as external to the unit. All participants were internal to the larger umbrella public sector organization, the "university community." The participants came from a range of functional departments and hierarchical levels, though all participants were acting in managerial-level roles during the change implementation and at the time of the interviews. All were, at minimum, at mid-career. Each participant's role in the project was unique. The identities of the participants remain confidential.

Initial Research Questions

This study's central research question directed the overall project: What are some identifiable key elements that create an environment for sustainable organizational change in continuing and higher education? Layered within the central question, several guiding questions were used to craft the specific interview questions, including the following:

1. What factors can be identified as keys to successful (or unsuccessful) change initiatives in the studied setting?

2. What role do key individuals play in a change implementation?

3. How is learning an influence in the outcomes?

4. What kind of model or transferable lessons might emerge from the particular case?

These guiding questions were used to develop 34 interview questions. (See Appendix A.)

In the initial research proposal, a further question about the differences between public sector and private sector organizational change was also considered. However, as only one participant identified as having had significant experience in the private sector, this secondary research question could not be analyzed meaningfully for this study.

Researcher Perspective

In the context of an interview-based qualitative research study like this one, it is important to recognize that the researcher must both select and interpret participants' comments (Blignault & Ritchie, 2009). With this in mind, it is relevant to note that I was a member of the organization experiencing the change due to the technology implementation studied here. Though my own role and work were minimally impacted, I participated in the organizational change process as a member of the change management team. I have therefore taken due care to represent participants' comments as they were stated and intended—neither more nor less positively or negatively. I also recognize that having been part of the organizational unit experiencing change, my own understanding of the context of the change within the organization led to development of the research questions themselves. Indeed, after the technology implementation had been completed, I became interested in others' experiences of the change, whether others deemed the project to have been successful, and what lessons could be learned from the collective experience. That is, the technology implementation project was completed before the research project was initiated. I also expected that several months of distance from the project might allow participants to approach interview questions from a reflective perspective. Although I conducted the interviews, no participant had any reporting line to me, nor did I report to any of the participants.

This research project was approved through a research ethics board as the specialization capstone project undertaken as a degree requirement of the master of business administration program, public policy and management specialization, at the University of Alberta. In accordance with the terms of the research ethics clearance, participant names will not be referenced and any information collected that could be identified with an individual remains confidential. Participants were informed that they were under no obligation to participate in the study, and all participants signed informed consent agreements before interviews were conducted.

Findings:
Results and Discussion

In keeping with the imperative of qualitative research, "combining the results and discussion section into a single section" (Blignault & Ritchie, 2009, p. 140) is intended to acknowledge that the results are themselves a combination of reporting what was found and "the analysis process itself" (Blignault & Ritchie, 2009, p. 140). Accordingly, this section first contextualizes the data, then presents and discusses the interview data.

Contextualizing the Data

Following the completion of all interviews, a thematic analysis of the data was undertaken in order to carefully review, consider, and code participants' responses within the context of the research questions set out above. To enable consistent and coherent results, an iterative approach was applied. That is, transcripts and notes were reviewed throughout the process of "constant 'cycling back and forth between theory and data in order to identify patterns and regularities,'" eventually moving from "initial themes to discovered themes" (Woods, 2006, p. 33). Of course, my own characteristics as the researcher are relevant, and I therefore acknowledge the potential for bias in my interpretation of the subjective perceptions of my respondents (Blignault & Ritchie, 2009, p. 141). Countering this potential, I also recognize and acknowledge that my connection to the organization may allow for interpretation that would be aligned with the participants' own.

The thematic presentation of findings set out below is the result of the analysis of discovered themes. The subsequent discussion further examines the interconnectedness of the identified themes.

Emergent Themes

In order to approach this study's key research question, and thereby identify key elements that create an environment for sustainable organizational change in continuing and higher education, it is useful to first determine what factors can be

identified as keys to the success of the change initiative studied. Accordingly, participants' comments related to minor negative factors are discussed separately. The responses are presented in Tables 1 through 4 in four thematic groupings: people, previous experience, preparation, and perspective. Each thematic grouping is organized as a set of three subthemes. Within each subtheme, a selected illustrative comment is emphasized in bold italics. Square brackets are used to provide clarification or to generalize information where the exact phrase used may negatively impact the anonymity of the participant. Except where square brackets are used, all comments in the tables are direct quotations from participants.

Theme 1: People[1]

As a theme, "people" included the subthemes of leaders, groups, and relationships.

It is often imagined that change—be it transformative or transitional—is best initiated by a leader's shared, inspiring vision (Kotter, 1995, 2007). Change, even large-scale change, driven by technological necessity, may require other leadership strategies. Participants in this study clearly and consistently identified publicly "supportive" (Table 1) leadership and the ability to resolve "unresolved questions" (Table 1) as one of the keys to the overall success of the project. This makes some sense: a technology-driven change is not necessarily inspirational—but the support for the value and direction of the change is essential (Kanter, 2003).

Table 1: Theme 1—People

Subtheme	Representative participant narratives
Leaders, champions	• ***The fact that very senior-level administrators championed the [initiative] was a major factor in the rest of the university accepting the project.*** • Senior management was very supportive. • We had a strong management team, with many voices at the table to talk about business processes. • We could refer unresolved questions to the oversight committee—we only had to do this about a half-dozen times. • When difficult decisions needed to be made, the oversight committee would resolve issues and mitigate risks.

1   Direct quotations from interviewed participants appear italicized and between quotation marks in this and the following sections. Square brackets within quotations are used for minor clarifications or to ensure anonymity of participants. Within the tables all reprentative partcipant narratives are also direct qutoations, as described above.

Subtheme	Representative participant narratives
Groups, involvement	• *I think that our approach was the right approach. It was inclusive. Everyone had the opportunity to be a member of a group, go to information sessions, and attend skills training. Everyone had the opportunity to be involved.* • We had a working group with representatives from [other impacted units] and external units. • We had a staff committee, the champions group; a change management team; the working group; and senior management was involved at the top. • The champions group helped deal with a lot of Q&A that needed to be communicated.
Relationships	• *Making connections with the people is essential. If people are talking with one another, they will be uncovering things.* • The working team, the project team, was very cohesive. • High-quality core team resources made a big difference. • There was a good level of engagement by other [external] units involved. • The continuity of having certain people working on the project helped. Having those connections worked really well. We developed ongoing relationships, seeing each other as resources, even now. • After the project, I had a stronger bond with people from the [unit undergoing the change].

While leaders and champions were certainly viewed as a part of the big-picture key to success, so were several variously tasked "groups," and the sense of personal and individual "involvement" that grew from those groups. "Buy-in" and support across all levels of the organization was often discussed in connection to some form of group involvement. Put another way, "Everyone needs not only to feel part of some larger effort but also to have the opportunity to meet and talk regularly with others doing related work" (Schall, 1997, p. 5).

Participants in this study also drew attention to positive personal relationships with one another, within and across teams and working groups. The "cohesive" (Table 1) nature of the working relationships emerged as a factor that contributed to the project's successful outcomes—and also to the outcome of positive new professional connections that have remained in place beyond the end of the project.

Theme 2: Previous experience

In the context of this particular technology-based change initiative, "previous experi-
ence" included subthemes of technical experience and expertise, managing change
awareness and experience, and reflective practice.

      Responses to specific interview questions about what worked well in terms of
the technical implementation as well as the overall project drew several responses that
described a "strong technical" (Table 2) team. But beyond the technical skills, partici-
pants also commented on the technical team's previous experience with similar projects,
in similar environments. One participant added that this "created instant credibility and
trust" (Table 2), a phrase reminiscent of the emphasis on the importance of relationships
noted in Theme 1.

Table 2: Theme 2—Previous Experience

Subtheme	Representative participant narratives
Technical experience and expertise	• ***The project team was very, very good; they had a really solid background and previously worked for the university and on similar projects.***
	• We had very strong technical people.
	• We had a great development team, the project team.
	• We had someone who had experience with a very similar implementation.
	• In all cases, I would strive to have the best possible resources, people who are capable and positive.
	• The project team had excellent resources.
	• The team hired to coordinate the project were experts, and most had worked on similar projects and for the univer-sity before. This created instant credibility and trust. With another group, you may have had to build that.

Subtheme	Representative participant narratives
Managing change, awareness and experience	• ***There's an increased realization and acknowledgement that change management is more important.*** • We know that people need to be informed, understand, and be shown the change. • It's important to get people supported after the change, assure them that it's going to be okay. • I've learned to focus a lot more on the communications and change management.* • We had a strong change management team. • Calming fears is a huge role.
Reflective practice	• ***We tried to anticipate things more with [another project's] experience in mind. I think that it's part of the growth of doing these kinds of projects.*** • [On a previous project,] we had a conscious set of principles and priorities to work with and by following those, we got a lot better acceptance of the project. We tried to do a similar thing with this project. • I've learned to focus a lot more on the communications and change management.* • I've been through this before so I wasn't really surprised. • With time, you understand how big the change was, and without the support we had we wouldn't have been successful. • We went through a similar [change]. When you're going through a technical product change, you're likely to encounter a lot of similarities. • Over the past few years, I've been involved in a few of these projects. One of the things I've noticed as we do more and more of these kinds of projects is that we're realizing that business processes may need to change to leverage the technology. • I think we could have had the change management piece in place even sooner.

* Response that falls under more than one subtheme.

The theme of "previous experience" also emerged as participants commented on managing change. Responses demonstrated participants' awareness of past change experiences, their own individual learning from past change-related experiences, and the evolving role of change management over the course of their professional careers to date.

The reflective practices of the interviewed group, although related to managing change as a subtheme, stood out as a separate subtheme and a key to the successful change initiative. Responses grouped in this subtheme ranged from direct comments on past change experiences, to comments on what was learned from this study's particular change initiative, to an explicit awareness that learning from present and past experiences is "part of the growth of doing these kinds of projects" (Table 2). These findings indicate that the previous experiences and subsequent reflective practices of management-level individuals, like the previous experiences of the technical team, may also be considered a key element of a successful change initiative.

Theme 3: Preparation

The theme of "preparation" includes three subthemes: communication, demonstration and early testing, and technical training and soft-skill development. Of the four main themes, "preparation," as an element that contributes to the creation of an environment for sustainable organizational change, is most closely aligned with some of the most familiar strategies for managing change.

For instance, Kotter and Schlesinger (2008) point out that "one of the most common ways to overcome resistance to change is to educate people about it beforehand. Communication of ideas helps people see the need for and the logic of a change" (p. 134). Participants in this study, too, identified communication, in many forms, as one of the important strategies employed during the change initiative.

Preparation for change in the form of early demonstrations and testing was also emphasized in participants' responses. Aligned closely to but distinct from communication, such demonstrations and testing supported individual and group learning about forthcoming changes, "selling opportunities [of the new system] to each other and the larger staff population" (Table 3). This concept is appropriately emphasized as well in change literature, which recognizes, for instance, that becoming aware of the need for a given organizational change precedes full understanding of the change (Nadler & Tushman, 1989). One participant's comment further suggested that "prototypes could have been [demonstrated] earlier" (Table 3).

Building upon communication and early demonstrations and testing, "commitment to training is critical" (Table 3), according to the responses. Though participants indicated that the training efforts were a "success" (Table 3) in this case, they also said that additional training and skills development, earlier and later in the process, might have been beneficial. Again, the context of technology-based change is relevant, if we understand that this kind of change needs to address the technical support needs of the organization over time (Orlikowski & Hofman, 1997), quite possibly extending well beyond the time frame of the change implementation.

Table 3: Theme 3—Preparation

Subtheme	Representative participant narratives
Communication	• ***There was considerable effort to engage everyone involved in the project, to give everyone the opportunity to provide feedback.*** • That you can never communicate too much is really true. • We had regular communication sessions. • There was certainly a lot of communication including [unit]-wide meetings for all individuals to come and discuss the changes that were coming. • The communication strategy helped to communicate with university staff. The most significant message was sent by [a very senior-level administrator]. • Where the impact was pretty minimal, for the external university community, the "announce" type of communication was used.
Demonstrations and early testing	• ***We had a trial group of [average users], not managers. They were good at selling opportunities [of the new system] to each other and the larger staff population.*** • We got nearly to implementation time before people got to see what the tool would look like. We couldn't have demoed any earlier, but prototypes could have been earlier. • The information sessions were not wasted efforts with the nature of this change.

Subtheme	Representative participant narratives
Technical training and soft-skill development	• *We need training for these things, and a variety of different options for training because people learn differently.*
	• We had a very good training program, delivered at the right time, with materials that were appropriate.
	• Training, delivered capably, make the whole training effort a success.
	• Hands-on training was well-attended and beneficial . . . though it's not until you actually get into the system that you really understand it.
	• Commitment to training is critical.
	• We could have/should have done more soft skills training. . . . We didn't start those until too late in the process.
	• Modules around change resilience were a nice touch. I always think you lead with that to get people to start to think about a mind shift, not just a new system and old processes.

Theme 4: Perspective

The fourth theme, "perspective," is one that broadly considers personal characteristics and individuals' perspectives that supported the organizational change initiative. It specifically includes the subthemes of a positive outlook, personal commitment to the result, and a future-oriented big-picture view of the change initiative.

The idea of a positive outlook was reflected in participants' responses in two ways. First, participants highlighted the importance of the positive outlook of others. One said, "We did observe a lot of people who went out of their way to prepare, who looked at this as a positive change" (Table 4). Second, responses reflected participants' own positive outlooks. For instance: "If something went sideways, it never worried me much because I knew there was always a way around it" (Table 4). This sentiment, although a reflection on a potentially negative situation, underlines the overriding positive outlook of the participant.

Table 4: Theme 4—Perspective

Subtheme	Representative participant narratives
Positive outlook	• *We did observe a lot of people who went out of their way to prepare, who looked at this as a positive change.* • There were people who spent extra time, who were participative in a number of different ways, who said, "What can I do to help make this happen." • Yes, the experience was positive. I learned so much. • We are smarter as a result. • This project introduced some very positive changes in the way we do things at the university. • [A member of the project team] really challenged us on some of those fears, saying 'Let's explore this.' It really helped us gain confidence in the change. • If something went sideways, it never worried me much because I knew there was always a way around it.
Personal commitment to result	• **Key things on the technical side were the dedicated work of the technical team. Also, the [unit's] business people who were so committed.** • The project team was extremely pleased with the success of the [technical] implementation. … I know that they spent many hours making sure that everything went through properly and they were exhausted. From everything I hear, the implementation went well, surprisingly well.

Subtheme	Representative participant narratives
A future-oriented big picture	• ***There were some forward-thinking, intuitive, and understanding people who knew that change needed to be made.*** • Letting people know, showing people what the new world will look like, helps in so many ways. • There were champions who saw early on where we were going, some really strong supporters. • The project had much greater implications than just the [primary organizational unit]. • [Senior administration] holds it up as a real success story. • [The unit's business lead] was a huge advocate, bridging and understanding, and really took the time to try and understand our position at the same time he did his work to help us understand his position. • There was foresight that in the future there may be a way that this project [may have other benefits]. • There's still some resistance, but over time, that will change. • From my perspective, it was a successful outcome. I think it can be a model for implementations in other areas, not just here, but across Canada.

A related subtheme, "personal commitment to the result," was distinct. In this data set, all comments coded within this subtheme were spoken about others. That is, none of the participants used phrases directly related to their own personal commitment to the result while talking about their own work and roles in the project. Although the reason for this observation cannot be adequately analyzed here, and although participants demonstrated their commitment to the project in other ways during the interviews, it is evident that participants valued others' personal commitment to the result and identified the commitment of others as an element that supported this change initiative.

Comments coded as reflecting upon "a future-oriented big picture" were, like those showing "a positive outlook," focused on self as well as others. Within this subtheme, responses were focused in two ways. First, comments reflected upon the specific change project and setting: "There were some forward thinking, intuitive, and understanding people who knew that change needed to be made" (Table 4). Second, responses considered a future beyond the project: "I think [this project] can be a model for implementations in other areas, not just here, but across Canada" (Table 4). This

subtheme highlights the importance of the ongoing or perpetual nature of change initiatives: that one flows into another, that future change initiatives can be expected.

Where There's Unwillingness, There's a Way: Some Manageable Barriers

Absent from the above discussion are some of the specific, yet manageable, barriers to successful organizational change initiatives that were identified by participants in this study. Comments that could be thematically identified in this way were significantly fewer than those discussed above. (Accordingly, to ensure that no responses can be identified with a single individual, this section will discuss aggregate data only.) Still, they are worth mentioning here in brief as "manageable barriers," given that all participants described the overall change experience and technical implementation as successful. They included change aversion and general resistance exhibited by a small number of individuals; initial underestimation of required time commitments; and specific instances of imperfect or insufficient communication.

Certainly, these manageable barriers are not uncommon. In particular, with change aversion and resistance, it is generally well understood that people can both resist and fear change (Kotter & Schlesinger), and that fear can slow the pace of change (Kanter, 2003). Communication inefficiencies identified were connected to the concept of resistance as well. Where communication was identified as insufficient, the transfer of information between individuals or groups (for example, from middle managers to front-line staff) was most often cited as problematic.

And yet these manageable barriers were identified in the context of questions about what could have been improved or what could have been different, and in the context of interviews that were reflective in nature. Although these specific barriers may be common in the context of change initiatives, they may also contribute to the lessons learned and the personal, professional, and organizational growth that derives from this kind of project.

Future Directions

Although the small number of participants is the most apparent limitation of this data set, the selected participants were particularly suitable for informing this research question. Each participant had sufficient understanding and knowledge of the change initiative to be able to comment on the strengths and weaknesses of the project on several levels. The selection of participants who were both internal and external to the organizational unit directly experiencing the change and whose roles in the project were sufficiently distinct gives some additional weight to responses that were thematically repeated across the data set. Because the participants were all acting in mid- to senior-level managerial roles at the time of the project and the study, the perspectives of the most senior leaders in the organization and the most junior employees in the

organization are absent; examining such perspectives may prove to be an avenue for future comparative study.

While this study may be of some value beyond the continuing and higher education setting, the data presented pertain to a single organizational context in the public sector during a single organizational change initiative. Again, this acknowledgement may point to a further avenue for future study. Finally, given this study's own understanding of the value of reflective practice, it is worth recognizing that these interviews were uniformly conducted approximately six months after the change initiative had been officially implemented. It may also prove valuable, in a future study, to consider immediate, short-term, medium-term, and long-term reflections on a single change initiative.

Reflections and Conclusion

As discussed in the preceding section, responses from interviews conducted as part of this study indicated that during this case of technology-based organizational change, participants observed a range of elements that contributed to what was viewed as a successful change initiative. Such elements can be read as being linked across four themes: people, previous experience, preparation, and perspective. Returning to the research goal of this study—identifying key elements that create an environment for sustainable organizational change in higher education—the thematic analysis performed provides a matrix-like framework for distilling some practical, unifying concepts.

Emergent Unifying Concepts

Although the technology-based change initiative presented in this study ultimately set the stage for the change process, technology itself is not a unifying concept. Similarly, simply identifying connected elements that support successful change initiatives does not suggest how to create a sustainable environment for organizational change in continuing and higher education.

In the quest for a unifying concept, then, a new set of questions requires consideration: What connects these themes anyway? How do they, taken together, contribute to successful organizational change? And, in practical terms, what would any emergent unifying concepts suggest about the creation of a sustainable environment for organizational change?

After consideration of these questions, alongside the analysis of interviews, "learning" emerges as a unifying concept, vis-à-vis the notion that "learning is change." Figure 1 represents these connected elements as a learning matrix where learning emerges as both "the act of learning" and as "the learners who act."
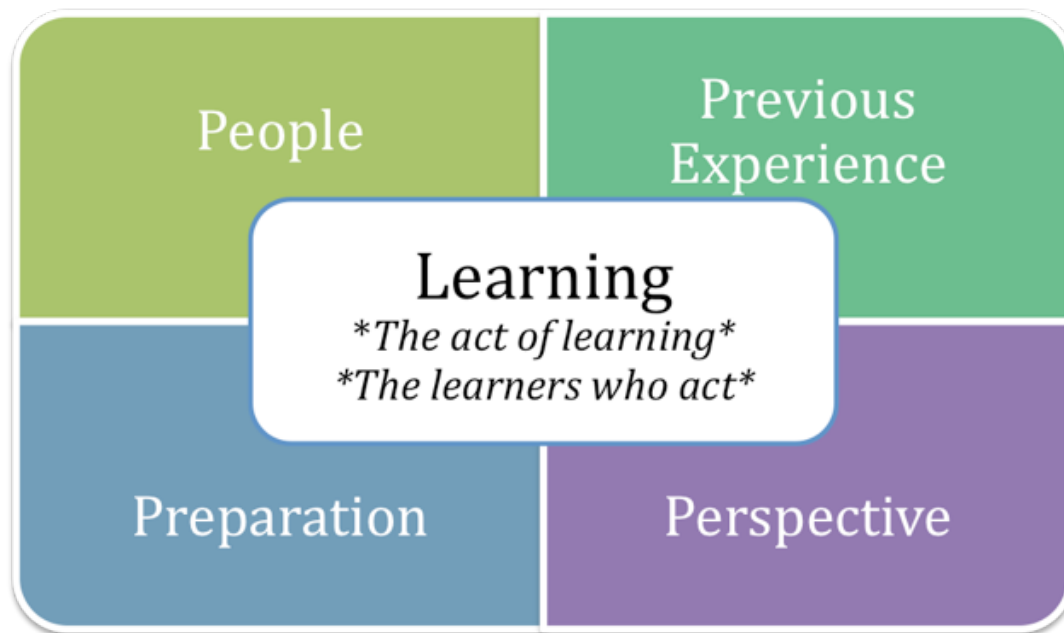
Figure 1: The p4 Learning Matrix

The act of learning

The process and act of learning is itself one-half of the proposed unifying concept that can be understood to bring together the four themes, as well as to support an environment for sustainable organizational change. Engaged in the act of learning, people (leaders and line staff alike) directly prepare for change, through communications, training, and skills development efforts. With the support of leadership at all levels, effectively implemented, intentional learning strategies give people across the organization the opportunity to reflect upon their own previous experience and develop personal perspectives on the change that are "anchored in the organization's culture" (Kotter, 2007, p. 103). Further, the act of learning in preparation for change becomes part of each learner's own previous experience, shaping perspective along the way.

Though resistance to change is common, it is also common to use early communication and education about the rationale and need for the change to overcome resistance (Kotter and Schlesinger, 2008). This is an apt description of the information meetings described in this case study. They were more than unidirectional information sessions; as one participant noted, "there was considerable effort to engage everyone involved in the project, to give everyone the opportunity to provide feedback" (Table 3). In this way, the meetings provided room for people within the organization to learn from one another, to connect as colleagues working toward a larger goal (Schall, 1997).

A similar approach to the more structured learning, the technical training and soft-skills development, also contributed to overcoming resistance and creating an environment for sustainable organizational change. As one participant put it, "Yes, the experience was positive. I learned so much" (Table 4).

The learners who act

As we learn—as we develop awareness, understanding, and skills—we change. As the second half of this unifying concept, reflective "learners who act" emerge as one of the striking notes of this study.

In terms familiar to change management practitioners, the learner who acts can first be thought of as a reflective practitioner (Schall, 1997). But, in the context of this study, the concept of "learners who act" further connects the four interview themes. That is, these learners are aware of and understand previous experience; use that previous experience to inform their future-oriented and positive big-picture perspective; and are guided by this perspective toward results and outcomes. As initially noted in the discussion of theme 2, in the words of one participant, "I think that it's part of the growth of doing these kinds of projects" (Table 2). This "growth" is the kind of change that exemplifies the "learning is change" concept.

It is relevant that participants in this study were all acting in managerial roles during this particular change initiative, emphasizing that leaders of change are learners too—and reflective learners are, perhaps, particularly well suited to lead change initiatives. Further, each participant could easily identify what he or she had learned from previous change experiences and what he or she had already learned from the case considered in this study. At least partly through the reflective process, continuous learning, similar to the tradition of continuous improvement, seems to set the stage for individual and organizational readiness for change. Moreover, learning does not cease and cannot be expected to cease upon the launch or formal implementation of a change. In their improvisational model for change management, Orlikowski and Hofman (1997) posit that "an important influence on the effectiveness of any change process is the interdependent relationship among three dimensions: the technology, the organizational context (including culture, structure, roles, and responsibilities), and the change model used to manage change" (p. 18).

The punctuated moment of change is never the conclusion. The change experience and process necessarily continue, if only because technology continues to change, and therefore future changes to and because of technology can be reasonably expected (Orlikowski & Hofman, 1997). A sustainable environment for successful and positively experienced change is one in which learning and change continue. In other words, intentional continuous learning supports organizational readiness for change; though specific change implementations can be marked in time, organizational change and learning is continuous; and learning itself *is* change, and deliberately recognizing and identifying learning as a kind of change can help to create an environment for sustainable organizational change over time.

Practical Implications:
Creating an Environment for
Sustainable Organizational Change

In one participant's words, "From my perspective, it was a successful outcome. I think it can be a model for implementations in other areas, not just here, but across Canada" (Table 4).

Of course, in media res, the experience of the change was not without stressful moments. And, as noted, some level of resistance was encountered along the way. Even the successful technology implementation studied here was marked by the occasional unexpected technical puzzle. So it is also worth reflecting on the timing of this study once again. Six months from launch, the experience is recent enough to provide relatively fresh memories of the project, and yet distant enough to provide some perspective. Through this lens, others preparing for a technology-based change initiative in continuing and higher education may wish to especially consider the following practical observations:

- Planning, project management, and highly skilled and experienced technical teams help.

- Communication from, to, and for many levels within the organization is essential, before, during, and after the change initiative.

- Positive, dedicated, reflective learners are well suited to the task of managing change initiatives.

- Some resistance to change is to be expected and can be expected to fade over time, but it can nevertheless be lessened by framing the initiative as learning-centred.

- Framing a change initiative as learning-centred in the continuing and higher education setting has an important double meaning: both (a) undertaking change in the service of learning (students) and (b) recognizing that learning itself is a form of change help to align the change initiative, as well as the technical training and skill development required, with the organization's purpose.

- By exploring the ways in which learning itself is a form of organizational change and, as such, supports organizational readiness for change, this study suggests that ever-present opportunities to learn—created, encouraged, and acted upon by individuals and groups—create an environment for lasting organizational change readiness and sustainable organizational change.

References

Ackerman, L. S. (1982). Transition management: An in-depth look at managing complex change. *Organizational Dynamics, 11*(1), 46–66.

Beer, M., & Nohria, N. (2000). Cracking the code of change. *Harvard Business Review, 78*(3), 133–141.

Blignault, I., & Ritchie, J. (2009). Revealing the wood and the trees: Reporting qualitative research. *Health Promotion Journal of Australia, 20*(2), 140–145.

By, R. T. (2005). Organisational change management: A critical review. *Journal of Change Management, 5*(4), 369–380.

Kanter, R. M. (1983). Change masters and the intricate architecture of corporate culture change. *Management Review, 72*(10), 18.

Kanter, R. M. (1985). Managing the human side of change. *Management Review, 74*(4), 52.

Kanter, R. M. (1999). The enduring skills of change leaders. *Leader to Leader (13)*, 15–22.

Kanter, R. M. (2003). Leadership for change: Enduring skills for change masters. *Harvard Business School Cases*, 1. *Business Source Complete*, EBSCO*host*.

Kotter, J. P. (1995). Leading change: Why transformation efforts fail. *Harvard Business Review, 73*(2), 59–67.

Kotter, J. P. (2007). Leading change. *Harvard Business Review, 85*(1), 96–103.

Kotter, J. P., & Schlesinger, L. A. (2008). Choosing strategies for change. *Harvard Business Review, 86*(7), 130–139.

Nadler, D. A., & Tushman, M. L. (1989). Organizational frame bending: Principles for managing reorientation. *Academy of Management EXECUTIVE, 3*(3), 194–204.

Orlikowski, W. J., & Hofman, J. D. (1997). An improvisational model for change management: The case of groupware technologies. *Sloan Management Review, 38*(2), 11–21.

Schall, E. (1997). Notes from a reflective practitioner of innovation. In A. A. Altshuler & R. D. Behn (Eds.), *Innovation in American government: Challenges, opportunities, and dilemmas* (pp. 360–377). Washington, DC: Brookings Institution Press.

Woods, P. (2006). *Successful writing for qualitative researchers*. London: Routledge.

Biography

Christie Schultz is the Assistant Dean (Academic) of the Faculty of Extension at the University of Alberta. She leads the faculty's teaching and learning activities within its continuing and professional education portfolio. Overseeing program planning, design, development, and delivery, she is engaged in providing quality educational experiences for nearly 8,000 learners annually. Prior to assuming this role, she served as the executive director of the Faculty of Extension's Learning Engagement Office, leading a team in the creation and support of engaged learning and teaching in adult and higher education. Christie has published and presented work in the areas of online learner engagement strategies, continuing and higher education, workplace learning, adult learners, organizational change, and technology implementation.

Christie Schultz est vice-doyenne (volet académique) de la Faculty of Extension de l'Université de l'Alberta. Dans le cadre de son mandat de formation professionnelle et continue, elle dirige les activités d'enseignement et d'apprentissage de la faculté. Supervisant la planification, la conception, la création et la prestation du programme, elle s'engage à fournir des expériences éducatives de qualité pour près de 8 000 apprenants annuellement. Avant d'accéder à ce rôle, elle était directrice générale du Learning Engagement Office de la Faculty of Extension et dirigeait une équipe dont le but est de créer et de soutenir l'apprentissage et l'enseignement engagés pour la formation supérieure et des adultes. Madame Schultz a publié et présenté des travaux portant sur les stratégies d'engagement d'apprenants en ligne, la formation supérieure et continue, l'apprentissage en milieu de travail, les apprenants adultes, les changements organisationnels et la mise en œuvre technologique.

Appendix A

Interview Questions

1. What was your role in the project?

2. Did you consider yourself to be internal or external to the organization?

3. Did your role change over the course of the project?

    a. If yes, how so?

4. What was your experience with similar projects before this one?

5. In your perspective, what change or other management tools were central to this project?

6. In general terms, what worked well during this project?

7. In general terms, what didn't work well during this project?

8. In terms of the technical implementation for this project, what worked well?

9. In terms of the technical implementation for this project, what didn't work well?

10. In terms of change management and the people in the organization, what worked well?

11. In terms of change management and the people in the organization, what didn't work well?

12. What role did senior management play in this project?

13. How was information about the project communicated to senior, middle, and front-line staff?

14. Did staff understand the purpose of or reason for the change?

15. How was information communicated to external stakeholders (i.e. students, other units)?

16. Did job-roles change for staff?

17. How were job-role changes managed?

18. What role did learning/training/skills development play?

19. Did anything surprise you during the course of the project?

20. Did any significant issues arise over the course of the project?

21. Did you observe so-called "change agents" within the course of the project?

22. Did your experience with similar previous projects influence your work and role in this one?

23. Have you worked on both private and public sector projects?

24. To what degree was technology a driver of organizational change before the project?

    a. Before the project?
    a. After the project?

25. What one thing would you change if you approached a similar project again?

26. What one thing would you insist upon doing again if encountering a similar project?

27. Overall, what was the outcome?

28. Overall, was the experience positive?

29. Overall, was the project (technical) implementation successful?

30. Overall, was the experience of organizational change successful?

31. Overall, would you recommend the approach that was taken?