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THE CANADIAN ARMY AND THE LEARNING ORGANIZATION: AN EXAMPLE OF CONTRADICTIONS?

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ABSTRACT

This dissertation examines the status of the Canadian Army in relation to the idea of a learning organization. In 2008, the Canadian Forces adopted an organizational learning strategy that, in effect, adopted the learning organization as a critical aspect of the vision for all elements of the organization. The Canadian Forces realized the inherent capacity of the learning organization to the support the evolving role of the Canadian Army in the future and an ability to adapt was deemed to be a critical enabler. The literature review covered several aspects like the learning organization, organizational learning, organizational change, organizational culture, and other militaries as learning organizations. The related assessment of the Canadian Army involved both a quantitative and qualitative assessment of key documentation, as well as a survey of a small sample of Canadian Army personnel. The assessment revealed that the Canadian Army exhibits limited support to the key tenets of a learning organization but contradictory evidence in key documents and some personnel's view does not allow a claim that the Canadian Army is a learning organization.

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CHAPTER 1 – INTRODUCTION

General Background

Learning is a natural activity that is an important part of human evolution. Without it, we as a species would not have survived. The concept of evolution applies to many aspects of the human species, as we inherently learn. For example, the evolution of warfare exemplifies our ability to learn from our past experiences and pay close attention to the lessons of our mistakes. Historically, a number of armies around the world have evolved and created concepts of warfare. Two examples include manoeuvre warfare and the adaptation of civilian based technology such as airplanes in order to compete with opposing armies. Learning is an important component of the military. An army's ability to learn is essential to military success, and learning will remain paramount as armies advance into the future.

Before the recognition and study of military evolution, learning and evolution had been key components of the industrial revolution. Many factories adopted industrial strategies in order to make their businesses more efficient and profitable. General Motors (GM) was a prime example of evolving business and industrial practices. GM revolutionized industry by adopting the idea of work specialization (or the division of labour) on assembly lines which is now commonplace in the manufacturing sector. GM learned that the division of labour led to factories being more efficient.[1] Many of their

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[1] Stephen P. Robbins, and Nancy Langton. *Organizational Behaviour: Concepts, Controversies, and Applications* (Toronto: Prentice Hall, 2001), 509.

practices have evolved and are still used by a number of industries. From a military

perspective, an evolution in military affairs is quite visible when one considers the styles

of warfare employed over the centuries. An understanding of the methods of warfare

employed by the Romans and Genghis Khan compared to that of the 1st and 2nd World

War demonstrate evolution. In addition, today's comprehensive or Whole of

Government approach utilized in Iraq and Afghanistan to defeat an insurgency also

demonstrate an ability to adapt and evolve.

In the last few decades, globalization has ignited another round of adjustments in

organizations. Globalization has increased competition. The ability to compete with

other businesses forced companies to find competitive advantages in the global market.

The natural evolution of business practices compelled companies to change their

operational procedures. The reasons varied from financial necessity to different

organizations displaying an inability to compete in their market of choice.[2] It was

inevitable that the conceptual practices of organizations would be targets of modification.

Like business, militaries and the concepts they employ, have also been influenced

by the world we live in. Naturally, a similar evolution in thinking occurred. In terms of

thinking, armies have moved from the traditional attritionist to a manoeuvrist perspective.

As well, the adoption of civilian organizational behaviour practices like the idea of

management into military day to day activities has become the norm. Another such

business concept that has percolated slowly into military psyche is the idea of the

learning organization or an organization's ability to learn faster than an adversary.

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[2] David A. Garvin, *Learning in Action: A Guide to Putting the Learning Organization to Work* (Boston: Harvard Business School Press, 2000), 8.

There is an immense body of research that summarizes the issue of a learning organization. The vastness of information generates many viewpoints from which the learning organization is assessable. One can assess a learning organization by focusing on concepts such as organizational learning, change and culture. One of the most popular advocates of a learning organization is Peter Senge in his 1990 seminal work *The Fifth Discipline: The Art and Practice of the Learning Organizations* that saw a series of updates in 2006. Though not without some criticism, his concepts within spurned a shift from physical change to mental and learning modifications as the key elements of change in organizations.[3] Recently, militaries have followed their civilian counterparts in the use of the learning organization as a method for militaries to refine their ability to effectively deal with and adapt to the contemporary security environment.

With transformation efforts of 2005 and the release of *Strategy 2020* in 2006, the Canadian Forces (CF) acknowledged that the Canadian military required change in the future to deal with this new environment. This admission was articulated when the 2006 document stated, "[s]trategy 2020 identifies both the challenges and opportunities facing the Department and the Canadian Forces as they adapt to change in a rapidly evolving, complex and unpredictable world."[4] This admission underscored that changes were on the way, but it failed to outline what types of change were necessary. The Chief of Defence Staff (CDS) summarized the emerging strategic environment as evolving and noted that one of the four areas for change is organizationally. He stated that

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[3] Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization* (New York: Doubleday/Currency, 2006), line 375.

[4] Department of National Defence. "Strategy 2020," **http://www.cds.forces.gc.ca/str/fw-ap-eng.asp**; Internet; accessed 29 January 2011.

"…adaptable and innovative institutions will outperform those unable to integrate new information technologies and management practices into their business processes. Leadership will be emphasized over administration and management."[5]

Moreover, the CF in 2010 issued a revised *Department of National Defence/Canadian Forces Organizational Learning Strategy* with the intent of aligning this concept with several other government and department initiatives.[6] This document contained explicit direction for each of the environments of the CF, which the Army is but one, to implement the strategy.[7] The direction did not explicitly state the need to become a learning organization, but tenets of it were implied and present. For example, you can see clear evidence of systematic problem solving, the concept of learning from experiences, best practices of others, and integration of learning into management practices – all of which provide an indication of learning organization ideals.[8] Even though the document did not explicitly support the idea of a learning organization, the supporting characteristics of an adaptable and innovative institution, bears resemblance to a learning organization.

The Canadian Army possesses a different role than private and public organizations and faces challenges of a very different nature. The Canadian Army is one microcosm of a government organization that, despite being the oldest CF environment, possesses an assortment of impediments such, as leadership and culture, which limit the

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[5] Department of National Defence. "Strategy 2020," n.p.

[6] Vice-Admiral A.B. Donaldson, *Department of National Defence/Canadian Forces Organizational Learning Strategy* (National Defence Headquarters: file 9910-2 (DDSM 5), 10 November 2010, 1.

[7] *Ibid.*, 3.

Army to either complete or surpass operational objectives, nor foster an environment of optimal effectiveness. The key objective of the Army is not one of profit, but one that focuses on potential military threats in various situations, and the Army's ability to adequately adapt to face such challenges.[9] John Nagl argued that in order to tackle this problem Armies will need to implement a learning organization culture.[10] The fact that the CF adopted an organizational learning strategy provided credence to Nagl's assertion. This approach is common in many militaries and in the United States Army Field Manual 22-100, the publication concluded that their army is a learning organization that will harness experiences to improve.[11] Despite a non-profit focus, a learning culture could be developed in the Canadian Army. David Garvin and Senge both advocated for the employment of a learning organization to deal with the tests of today and the future.[12]

For over three years there exists a CF organizational learning strategy to inculcate the Army with the tenets of a learning organization. The requirement to enact the CF organizational learning strategy provides an excellent opportunity to evaluate the Army as a learning organization. The recognition by the Army that the new security environment requires change furthers the idea that implementing a learning organization is crucial to future success. As such, an analysis of the Army is possible at this time to

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[8] Vice-Admiral A.B. Donaldson, *Department of National Defence/Canadian Forces Organizational Learning Strategy* …, 1-2.

[9] Department of National Defence, *The Army: Advancing with Purpose* - Edition 2 (Ottawa: Director Land Strategic Planning, 2009), 23.

[10] John A. Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam* (Chicago, Ill.; University of Chicago Press, 2005), 223.

[11] Department of the Army, *Army Leadership – Field Manual 22-100* (Washington, D.C.: Department of the Army, 1999), 5-25.

[12] David A. Garvin, *Learning in Action: A Guide to Putting the Learning Organization to Work*…, 8; Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization*…,n.p..

evaluate the Army's ability, so far, to adopt the tenets of the CF organizational strategy. This opportunity may also provide insight into the Army's capacity to face successfully the future threats. Moreover, there are several traditional barriers to change that will be detailed further such as culture, tradition, and leadership. Yet, in order to overcome the barriers one must be aware of their existence. As such, a learning organization analysis of the Army may determine the existence and the types of barriers and their effects on change.

There are several other questions that when raised provide indications of the Army's position in relation to a learning organization. For example, the question of leadership and whether or not it is transformational as well as the approachability and openness of the leadership to ideas and suggestions from subordinates are important queries. Moreover, to inquire about the level of awareness of the CF Organizational Learning Strategy, key leadership manuals as well as Army supporting processes offers another perspective. The employment of the learning organization within the CF is in its nascent stages and may be premature. However, in light of this direction from the Army's higher authority as well as the Army's recognition of the need to adapt in order to operate effectively in today's security environment, an evaluation of the army as a learning organization is possible.

Thesis

In preparing to be successful in the challenging security environment the Canadian Army aspires to become a learning organization. To date, there are indications

of progress evident in recent Army leadership as well as training, operational, and administrative directives and doctrine. Nevertheless, this thesis argues that insufficient reforms have been made to complete the army's transformation into a learning organization. Further efforts will be required to reconcile the contradictions within various Army documents, processes, and practices to become a learning organization so that the Army can succeed in the new security environment.

Methodology

This paper will evaluate the army using both qualitative and quantitative methods. This will provide a more holistic view of the Canadian Army. The paper will commence with an extensive literature review that covers the areas of a learning organization, organizational learning, organizational culture, and organizational change. It will also include a succinct review of armies including the United Kingdom and United States to observe if learning organization exists. Next, Chapter 3 will frame the idea of a learning organization from the Canadian Forces perspective in order to understand the doctrinal and policy environment that the Army operates within. This will be completed with an overview of the key elements of the learning organization embedded in the CF Leadership doctrine as well as the *2010 Department of Defence/CF Organizational Learning Strategy*.

With the framework in place, Chapter 4 will be a multi-methods research analysis of the Canadian Army utilizing both Peter Senge's five disciplines of a learning organization and John Nagl's five question set on why an army is a learning organization.

The ten areas that are covered will display that some visible signs of a learning organization exist, but there is evidence that indicates that the CF is not yet a learning organization. Finally, Chapter 5 will propose adjustments that can be made in the Canadian Army in areas such as education, personnel evaluation, and documentation that will assist the advancement of a learning organization.

CHAPTER 2 – LITERATURE REVIEW

Introduction

The majority of the literature outlines the learning organization from a business sector perspective. Nomenclature evaluating the Canadian Army as a learning organization is relatively scarce because the concept is in its infancy. Thus, like CF transformation, the learning organization's development is an ongoing process and, at this time, continues to be in the ascent phase of progression into the daily psyche of personnel. While there are related documents within the CF, these focus mainly on forms of learning. They cover the CF distance learning strategy as well as the mismatch of the personnel assessment process and the idea of a learning organization.[13] These documents are of limited value for the purpose of this paper because they have modest direct applicability to the idea of the Army as a learning organization. Despite the lack of direct research, there exists a vast amount of information on learning organizations and associated topics like organizational learning, change, and culture in the private sector. Also, there have been studies on other armies around the world on the topic of organizational learning. While applicable to other sectors, including military organizations, the learning organization literature has both strengths and limits in its capacity to understand, explain and advance change. Yet, a summation of the key aspects of each of these topics will assist in the evaluation of the Canadian Army as a learning organization.

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[13] B.E. Boland, "Hierarchical Assessment and the Learning Organization – An Oxymoron?" (Toronto: Canadian Forces College Command Staff Course Paper, 2001), 1; L. Gagnon, "Distance Learning Strategy for Canadian Forces Command and Staff Course" (Toronto: Canadian Forces College Command Staff Course Paper, 2002), 1.

Learning Organization

Reasons for Learning Organization Evolution.

Over the last few decades, the concept of a learning organization has become a popular way to deal with the changes in business. A learning organization was required to maintain a high level of effectiveness and adapt to the evolving business environment.[14] Certain conditions existed that facilitated the popularization of the learning organization. Tara Fenwick concluded that the three following factors allowed the concept of a learning organization to develop; first, the development of concepts through the study of collective learning and the idea that organizations are adaptable and proactive; second, economic shifts of the 1980s into a global economy, deregulation, and information-based organizations attracted organizations to the idea of continuous learning as a force to compete more effectively; and third, the movement to Total Quality Management that made structural and process changes to organizations.[15] The underlying idea was that a shift into a learning organization facilitated by these factors would enable organizations to compete better today and into the future.

Defining a Learning Organization

There are enormous variants to the definition of a learning organization from the complex to the simple. David Garvin outlined a learning organization as "…an organization skilled at creating, acquiring, interpreting, transferring, and retaining knowledge, and at purposefully modifying its behaviour to reflect new knowledge and

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[14] David A. Garvin, *Learning in Action: A Guide to Putting the Learning Organization to Work…*, 4; Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization…*, line 382..

insights."[16] Whereas, Ranaan Lipshitz, Micha Popper, Sasson Oz defined a learning

organization as "…an organization that institutes OLMs[organizational learning

mechanisms] and operates them regularly."[17] Finally, in his seminal work Senge

provided a short yet ambiguous definition of a learning organization as "…an

organization that is continually expanding its capacity to create its future."[18] However,

he continued describing his definition stating that,

> [f]or such an organization, it is not enough merely to survive. "Survival learning"
> or what is more often termed "adaptive learning" is more important – indeed it is
> necessary. But for a learning organization, "adaptive learning" must be joined by
> "generative learning," learning that enhances our capacity to create.[19]

On the surface the three definitions may appear to be different. However, a more in-

depth analysis of all the definitions highlight a common theme of adaptation that appears

when discussing a learning organization.[20]

Learning Organization Components.

There are many key components to create a successful learning organization. Yet

there are fundamental differences on the characteristics to develop and become a learning

organization. There is a lack of consensus between proponents of learning organizations.

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[15] Tara J. Fenwick, "Limits of the learning organization: a critical look,"
http://www.ualberta.ca/~tfenwick/ext/pubs/print/lngorgeric.htm; Internet; accessed 29 January 2011.

[16] David A. Garvin, *Learning in Action: A Guide to Putting the Learning Organization to Work…*,
11.

[17] Raanan Lipshitz, Micha Popper, and Sasson Oz, "Building Learning Organizations: The Design
and Implementation of Organizational Learning Mechanisms," *The Journal of Applied Behavioral Science*
32, no. 3 (Sep, 1996): 293.

[18] Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization…*, line
382.

[19] *Ibid*., line 383-384.

[20] Bernard M Bass, "The Future of Leadership in Learning Organizations," *Journal of Leadership
& Organizational Studies* 7, no. 3 (Summer 2000): 19; Brian R Fry, and J. Samuel Griswold, "Defining and
Implementing the Learning Organization: Some Strategic Limitations," *Public Administration Quarterly*
27, no. 3/4 (Fall, 2003): 313.

Mike Pedler, Tom Boydell, and John Burgoyne presented eleven characteristics that are essential to developing a learning organization. They are a "…learning approach to strategy, participative policy-making, informating, formative accounting and control, internal exchange, reward flexibility, enabling structure, boundary workers as environmental sciences, inter-company learning, learning climate, and self-development opportunities for all."[21] This is a comprehensive list and it hampers a simple evaluation within this paper's scope. On the other hand, in his seminal work *The Fifth Discipline: The Art and Practice of the Learning Organization* Senge advocated the five disciplines of systems thinking; personal mastery, mental models, building shared vision, and team learning. He believed these were key mechanisms to creating a successful learning organization.[22] Despite the differences, there are linkages between the proposals such as Pedler et al.'s inter-company learning and learning climate with Senge's discipline of team learning. Thus, there is a common thread in the ideas of what is actually necessary to become a learning organization.

Senge and Pedler et al.'s ideas provide an avenue for evaluating an organization to determine whether they are a true learning organization. An analysis of an organization against these factors offers areas for improvement so that they may attain the desired end-state of a learning organization. However, others like Garvin and Nagl presented a question set to determine whether or not a learning organization exists. Garvin advocated the use of a litmus test involving the following questions,

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[21] Mike Pedler, Tom Boydell, and John Burgoyne, *Learning Company Project: A Report on Work Undertaken October 1987 to April 1988* (Sheffield: The Training Agency, 1988), n.p.

a.   does the organization have a defined learning agenda,
b.   is the organization open to discordant information,
c.   does the organization avoid repeated mistakes,
d.   does the organization lose critical knowledge when key people leave; and
e.   does the organization act on what it knows.[23]

In his analysis of the United States and United Kingdom's armies in Vietnam and

Malaya, Nagl employed a five question set to establish whether the army is a learning

institution. They were as follows,

1.) does the army promote suggestions from the field,
2.) are subordinates encouraged to question superiors and policies,
3.) does the organization regularly question its basic assumptions,
4.) are high ranking officers routinely in close contact with those on the ground and open to their suggestions, and
5.) are Standard Operating Procedures (SOPs) generated locally and informally or imposed from the center.[24]

Despite the employment of these questions in two different types of organizations,

Garvin and Nagl's questions appear similar. The similarity is observable through

Garvin's idea of organizational openness to discourse and Nagl's question on whether or

not leaders are in close contact with personnel and leaders' openness to subordinates

ideas. For the purpose of the forthcoming analysis Nagl's question set provides a clear

connection to the military context and this will be explored. The ideas of Nagl and Senge

are appropriate to a review of the Canadian Army as a learning organization.

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[22] Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization…*, lines 236-297.

[23] David A. Garvin, *Learning in Action: A Guide to Putting the Learning Organization to Work…*, 11-13.

[24] John A. Nagl. *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam* (Chicago, Ill.; University of Chicago Press, 2005), 10.

Learning Organization and Leadership.

For most, it is no secret that leadership is critical to the success of a business, group, institution, or government agency. Leadership is equally important in a learning organization. Jerald Greenberg in his book, *Managing Behavior in Organziations*, defined the most important function of a leader as "… to create the essential purpose or mission of an organization and the strategy for attaining it."[25] He elaborated further on leader's roles by stating that a leader must "…focus on innovating, changing things for better, set overall direction, inspire people to work, take a long-term perspective, and willing to take risks."[26] Greenberg offered a credible list of what a leader should be doing. Other scholars produced more specific principles in a learning organization setting. Senge argued for the idea of a leader as role model by stating, "[s]o long as the leader continues to be a model, his work habits will set the norm."[27] Garvin agreed with Senge, but took that idea further observing that leaders, "…must cultivate the proper tone, fostering desirable norms, behaviors, and rules of engagement."[28] In army vernacular, this simply means setting an example for others to follow or emulate.

Being a role-model is a critical role of leaders. However, it is necessary that a leader in a learning organization undertake other key roles. First, the role of communicator may seem important for those with leadership experience considering

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[25] Jerald Greenberg, *Managing Behavior in Organizations - 5th edition* (New Jersey: Prentic Hall, 2010), 311.

[26] *Ibid*., 311.

[27] Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization…*, line 1620.

[28] David A. Garvin, *Learning in Action: A Guide to Putting the Learning Organization to Work…*, 190.

leaders communicate every day. However, Peter A. Smith, Senge, and Garvin do not

explicitly state the need for communications as a key requirement. The need for

communication is implicit in one of their similar ideas: sharing information.[29] Second,

acting as a supporter is also a vital role of a leader in a learning organization. Leonel

Prieto, in his article *Some Necessary Conditions and Constraints for Successful Learning

Organizations* advocated a distributed and collaborative leadership style as this fosters

the increase of human potential.[30] Lastly, a leader as a convertor is an essential

characteristic with a learning organization. Bernard M. Bass alluded to this role when he

wrote that the future leaders "…will convert mandates and problems into challenges and

opportunities."[31]

Summary of a Learning Organization.

In a learning organization it is vital to "…learn what is needed to adapt to the

rapid changes in the market and technology." [32] Adaptation is a common theme when

discussing the idea of a learning organization. This theme comes to the forefront when

discussing definitions of a learning organization, the essential features of a learning

organization or the method to assess a learning organization. Moreover, leaders play

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[29] Peter A. C. Smith, "The Learning Organization Ten Years on: A Case Study," *The Learning Organization* 6, no. 5 (1999): n.p.; Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization…*, line 236-308; David A. Garvin,, *Learning in Action: A Guide to Putting the Learning Organization to Work…*, 214.

[30] Leonel Prieto, "Some Necessary Conditions and Constraints for Successful Learning Organizations," *Competition Forum* 7, no. 2 (2009): 517.

[31] Bernard M. Bass, "The Future of Leadership in Learning Organizations," *Journal of Leadership & Organizational Studies* 7, no. 3 (Summer 2000): 38.

[32] Bernard M. Bass, "The Future of Leadership in Learning Organizations," *Journal of Leadership & Organizational Studies* 7, no. 3 (Summer 2000): 27.

more than one critical role in a learning organization and all play a part in becoming a learning organization.

Organizational Learning

Complexity and Perspectives.

The literature in relation to organizational learning is even more developed than the scholarly work on learning organization. Victor Freidman, Rannan Lipshitz and Micha Popper alluded to the literature confusion in their 2005 article *The Mystification of Organizational Learning* when they stated, "…this literature has yet to add up to a coherent body of knowledge."[33] Furthermore, they suggested that this is the situation due to "…(a) the lack of a clear, agreed-on definition, (b) a persistent problem of conceptual divergence, and (c) and difficulty in translating the concept into a researchable construct."[34] Mark Easterby-Smith, Robin Snell and Silvia Gherardi took these two ideas further by explaining that the growth in organizational learning field occurred due to three external factors such as "…the speed of technological change, the advance of globalization; and growing corporate competition."[35] Moreover, Easterby-Smith in his 1997 article *Disciplines of Organizational Learning: Contributions and Critiques* summarized the several viewpoints of organizational learning and stated that "…each

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[33] Victor J. Friedman, Raanan Lipshitz, and Micha Popper, "The Mystification of Organizational Learning," *Journal of Management Inquiry* 14, no. 1 (Mar 2005): 20.

[34] *Ibid*., 20.

[35] Mark Easterby-Smith, Robin Snell, and Silvia Gherardi, "Organizational Learning: Diverging Communities of Practice?" *Management Learning* 29, no. 3 (Sep 1998): 259.

discipline employs a distinct ontology with regard to the social phenomena that are considered to be the core of organizational learning."[36] The ontological perspectives detailed by Easterby-Smith include human development, information processing, social structures, competiveness, efficiency, and meaning system. The perspectives' contributions to the field include learning styles, single and double loop learning, and cultures effects on organizational learning. The problems brought forth through the various views include constraints like defensive mechanisms and cultural barriers.[37] As a consequence, differing perspectives demonstrate that organizational learning is not a simple area of study and comprehending the interrelationships and effects of all these ideas is vital for organizations in today's global operating environment.

Defining Organizational Learning.

The various perspectives of organizational learning led to the development of numerous definitions. Chris Argyris and Donald Schön in 1978 stated in their seminal work *Organizational Learning: A Theory of Action Perspective* that "…organizational learning involves the detection and correction of error."[38] This is a very simple statement that does not provide sufficient clarity when defining organizational learning, but rather, the statement explained how it is accomplished. In 1998 Amy Edmondson and Bertrand Moingeon defined organizational learning as "…a process in which an organization's members actively use data to guide behaviour in such a way as to promote the ongoing

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[36] Mark Easterby-Smith, "Disciplines of Organizational Learning: Contributions and Critiques," *Human Relations* 50, no. 9 (Sep, 1997): 1086.

[37] Mark Easterby-Smith, "Disciplines of Organizational Learning: Contributions and Critiques,"…, 1087.

adaptation of the organization."[39] This is a definition with some potential utility, but is

mismatched with the tenets of Senge's learning organization ideals. Yet, a definition by

Dusya Vera and Mary Crossan more appropriately suits Senge's key aspects when they

outlined organizational learning as "…the process of change in individual and shared

thought and action, which is affected by and embedded in the institutions of the

organization."[40] This definition provides a framework from which to start understanding

a learning organization.

Types of Learning.

Understanding the manner in which learning occurs is crucial in organizational

learning. Argyris and Schön were two of the first scholars to provide an explanation on

the different types of learning through their ideas of single and double loop learning.

Brian Paziuk in *Building a Learning Organization at National Defence: Evolving the*

Learning and Career Centre Network summarized the two types of learning as follows.

Single loop is "…analogous to incremental change that does not entail critical

examination of organizational policies or objectives."[41] Whereas double loop learning

"…occurs when a critical examination of vales, assumptions, norms, and strategies lead

to transformational change within organizations."[42] Ricardo Chiva, Antonio Grandio and

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[38] Chris Argyris and Donald Schön, *Organizational Learning: A Theory of Action Perspective* (Reading, MA: Addison-Wesley, 1978), 3.

[39] Amy Edmondson and Bertrand Moingeon, "From Organizational Learning to Learning Organization," *Management Learning* 29, no. 1 (March 1998): 12.

[40] Dusya Vera and Mary Crossan, "Organizational Learning and Knowledge Management: Toward and Integrated Framework," In *The Blackwell Handbook on Organizational Learning and Knowledge Management* (Malden, MA: Blackwell, 2003), 123.

[41] Brian Paziuk, "Building a Learning Organization at National Defence: Evolving the Learning and Career Centre Network" (Master's thesis, Royal Roads University, 2009), 32-33.

[42] *Ibid*., 33.

Joaquin Alegre referred to these types of learning as adaptive and generative learning.[43]

Both types of learning are means of change but Senge posits that in a learning

organization "…adaptive learning must be joined by generative learning, learning that

enhances our capacity to create."[44] Moreover, Senge and Chiva et al. proposed the idea

that people in a true learning organization commit to lifelong learning.[45] In recent years,

the idea of triple loop learning evolved and Markus Peschl proposed that for a intense

change to occur new dynamics must "…be introduced; profound change does not only

happen in the cognitive domains, but touches a more fundamental level – an *existential*

level that includes the person and his/her attitudes, values, habitus…."[46] To enact

organizational learning within any organization, it is critical that the formal leaders in the

organization possess a solid knowledge of the type of learning underway and required for

their organization.

Organizational Learning Dominance.

R. Evan Ellis in his article *Organizational Learning Dominance: The Emerging*

Key to Success in the New Era of Warfare furthered organizational learning when he

offered the idea of organizational learning dominance. Ellis defined organizational

learning dominance as "…the ability to understand, revise, or reverse expectations about

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[43] Chiva, Ricardo, Antoinio Grandio and Joaquin Alegre, "Adaptive and Generative Learning: Implications from Complexity Theories," *International Journal of Management Reviews* 12, no. 2, (June 2010): 114.

[44] Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization…*, line 385.

[45] Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization…*, line 244; Chiva, Ricardo, Antoinio Grandio and Joaquin Alegre, "Adaptive and Generative Learning: Implications from Complexity Theories,"…, 120.

[46] Markus Peschl, "Triple-Loop Learning as Foundation for Profound Change, Individual Cultivation, and Radical Innovation. Construction Processes Beyond Scientific and Rational Knowledge," *Constructivist Foundations* 2, no. 2 (2007): 138.

"what works and what does not" more rapidly that one's opponent."[47] Ellis outlined the need to undertake this approach in learning and gave reasons such as the "…current uncertainty of the nature of warfare, real-time situational awareness increases in granularity which enables recognition, exploitation of the enemy faster, and systems perspective will increase consequence of systematic disruptions."[48] The ability to outlearn your adversary will become an essential aspect of organizations in order "…to exploit windows of opportunity as effectively as possible."[49] In the end, organizational learning advocates suggest that "…to conceptualize learning not as another managerial lever that can be pulled by senior executives at their behest, but as normal, if problematic, process in every organization involving reciprocal exchanges…."[50]

Summary of Organizational Learning.

The study of organizational learning is a complex endeavour due to the variety of ontological perspectives that underscore the subject. An awareness of the types of learning either single and double loop or adaptive and generative learning will provide the leadership of an organization the tools to create a situation where they dominate their competition by learning better.

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[47] R. Evan Ellis, "Organizational Learning Dominance: The Emerging Key to Success in the New Era of Warfare," *Comparative Strategy* 18, no. 2 (Apr 1999): 191.

[48] *Ibid*., 194.

[49] R. Evan Ellis, "Organizational Learning Dominance: The Emerging Key to Success in the New Era of Warfare,"…, 194.

Organizational Change

Reasons for Change.

This section of the paper will discuss the idea of organizational change and the principles of why change is required, types of change, why change is resisted, how change occurs, and some ways to overcome resistance to change. The Darwinian idea of adaptation for a species survival provides the rational for organizations to embark on fundamental change. Greenberg, in his book, provided a number of reasons for change such as "…advances in technology, changing employee demographics, performance gaps, government regulation, and global economic competition."[51] In fact, he articulated the true reason for the necessity to change when he stated, "…either adapt to changing conditions or shut your doors."[52] Gareth Morgan in *Images of Organization* demonstrated support for Greenberg's assertion by stating, "[t]o achieve greater effectiveness managers must become skilled in identifying and using different approaches to organization and management."[53] Frederick A. Starke and Robert W. Sexty provided the view that change is a result of internal and external forces and that "[c]hange is a fact of life in any organization, since virtually every time a manager makes a decision some

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[50] Mark Easterby-Smith, "Disciplines of Organizational Learning: Contributions and Critiques," *…,* 1109.

[51] Jerald Greenberg, *Managing Behavior in Organizations - 5th edition …*, 401-404.

[52] *Ibid*., 400.

[53] Gareth.Morgan, *Images of Organization* (San Francisco, Calif.: Berrett-Koehler Publishers, 1998), 4.

type of change occurs."[54] Moreover, Stephen Robbins and Nancy Langton outlined that change is "…an intentional, goal-oriented activity."[55] As a consequence, change may be pragmatic action that occurs because of a number of reasons caused by either internal or external forces.

Categories of Change.

Along with attempting to understand why change is necessary, an understanding of the different categories of change is useful for all parts of an organization. There are a variety of methods utilized to categorize change. First, the idea of first-order change and second-order change is one way that change is discussed. Greenberg defined first-order change or incremental change as change that is ongoing all the time and does not create major shifts in an organization's operations. In juxtaposition, the more complex type is second-order change or quantum change which involves a sudden shift in organizations operations.[56] In addition to these concepts, the application of types is another way to explain change. The different type of change can be discussed in terms of developmental, transitional or transformational. The key to understand is that each type requires distinct solutions.[57] Thus, the order and type of change enables a leader to understand change and then explain it.

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[54] Frederick A. Starke and Robert W. Sexty, *Contemporary Management in Canada*. (Scarborough: Prentice Hall, 1998), 545,-548.

[55] Stephen P. Robbins and Nancy Langton, *Organizational Behaviour: Concepts, Controversies, and Applications* (Toronto: Prentice Hall, 2001), 586.

[56] Jerald Greenberg, *Managing Behavior in Organizations - 5th edition* …, 401.

[57] L. Ackerman Anderson and D. Anderson, *Beyond Change Management: Advanced Strategies for Today's Transformational Leaders* (San Francisco, CA: Jossey-Bass/Pfeiffer, 2001), 31-50.

Barriers to Change.

If change is a necessary aspect of daily life in an organization then why does change face resistance? According to Colleen Lucas and Theresa Kline change is problematic and several barriers exist that make the change difficult to group dynamics.[58] Stefanie Hetzner, Martine Gartmeier, Helmust Heid, and Hans Gruber in a study of German banks stated that "…employee's attitudes, fast-paced change and lack of time to adjust to workloads were factors inhibiting learning and the facilitation of others' learning."[59] However, Robbins and Langston, as well Greenberg, provided a more comprehensive view of barriers through categorizing of individual barriers. These included facets such as habit, security, threats, fear of the unknown, organizational barriers including group and structural inertia, and threat to power structures.[60] These lists are not complete, but do provide some of the obstacles that organizations face in attempting to make changes.

Dynamics of Change.

Change is a process and there are theoretical and practical perspectives on how change unfolds within an organization. First, Kurt Lewin provided the theoretical perspective of change in 1950 in his seminal book *Field Theory in Social Science*. He outlined the three steps to change as unfreezing, moving, and refreezing. In order to

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[58] Colleen Lucas and Theresa Kline, "Understanding the Influence of Organizational Culture and Group Dynamics on Organizational Change and Learning," *The Learning Organization* 15, no. 3 (2008): 286.

[59] Stefanie Hetzner, Martin Gartmeier, Helmut Heid, and Hans Gruber, "The Interplay between Change and Learning at the Workplace" *Journal of Workplace Learning* 21, no. 5 (2009): 409.

[60] Stephen P. Robbins and Nancy Langton, *Organizational Behaviour: Concepts, Controversies, and Applications…*, 605-608; Jerald Greenberg, *Managing Behavior in Organizations - 5th edition …*, 411-412.

change an organization, Lewin believed one must unfreeze the status-quo, then move to

the new condition, and then refreeze the condition resulting in a new status quo.[61] Figure

1 illustrates the relationship of these stages. John Kotter in his article in the *Harvard*

Business Review on Change offered an eight stage process for effecting change,

> …establishing a sense of urgency, forming a powerful guiding coalition, creating
> a vision, communicating the vision, empowering other to act on the vision,
> planning for and creating short-term wins, consolidating improvements and
> producing still more change, institutionalizing new approaches.[62]

Thus, Lewin and Kotter's models explain only the steps to organizational change.

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┌──────────────┐          ┌──────────────┐          ┌──────────────┐
│              │          │              │          │              │
│   Unfreeze   │  ──────▶ │    Moving    │  ──────▶ │  Refreezing  │
│              │          │              │          │              │
└──────────────┘          └──────────────┘          └──────────────┘
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Figure 2.1 – Lewin Model of Change[63]

Enacting Change.

These models illustrate how change occurs, but do not mention the specific

actions that an organization must adopt to enact change. Greenberg in *Managing*

Behavior in Organizations provided some suggestions on what approaches are possible in

dealing with barriers to change. There are a number of approaches to utilize. They

include "…shaping the politic dynamic, workforce education, convincing the workforce

of the need to change, employee involvement in change, a reward system for constructive

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[61] Kurt Lewin, *Field Theory in Social Science* (New York: Harper & Row, 1951), n.p..

[62] John Kotter, "Leading Change: Why Transformation Efforts Fail," *Harvard Business Review* 73, no. 2, (March 1995): 59-68.

[63] Kurt Lewin, *Field Theory in Social Science*…, n.p..

behaviours, portray the urgency of change, challenge the status quo and creating a learning organization."[64] This last approach goes to the heart of the paper's discussion.

Robbins and Langton provided six strategies to overcome resistance to change such as "…education and communication, participation, facilitation and support, negotiation, manipulation and cooptation, and coercion."[65] One should note that this plan aligns itself well with the roles of the leader mentioned earlier. Even though not explicit in Robbins and Langton's strategies, a common requirement with all of these suggestions and procedures is the need to engage in excellent communications so the organization's direction and guidance is well-understood.

The leader facilitates workplace change in a number of ways. The adaptation of the appropriate management system is crucial because those who "…have experienced changes in which a high level of learning has been achieved have adapted their management systems…."[66] The system must fit within the tenets of the learning organization. There are several ways that an organization can carry out change. The leader must be able to communicate clearly both what needs to be done and what is available to do it.[67] In effect, credible leaders who communicate well and adapt are necessary for organizational change because "…the learning culture you create hinges on

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[64] Jerald Greenberg, *Managing Behavior in Organizations - 5th edition* …, 414-416.

[65] Stephen P. Robbins and Nancy Langton, *Organizational Behaviour: Concepts, Controversies, and Applications…*, 609-610.

[66] Nekane Aramburu, Josune Sáenz, and Olga Rivera, "Organizational Learning, Change Process, and Evolution of Management Systems," *The Learning Organization* 13, no. 5 (2006): 434.

[67] Stefanie Hetzner, Martin Gartmeier, Helmut Heid, and Hans Gruber, "The Interplay between Change and Learning at the Workplace," *Journal of Workplace Learning* 21, no. 5 (2009): 411.

the individual mindset of leaders."[68] This idea is very reminiscent of the shift of thinking espoused by Senge. Thus, a great leader is aware that their key task in changing culture is to observe and remove the obstacles.[69]

Summary of Organizational Change.

In summary, an organization's ability to comprehend the reasons for change is the first step of successful organizational change. Once an organization recognizes the reasons, as well as understands the barriers and categories, the leader employs a change methodology. For example, a leader could choose to educate the workforce or change the reward system. Regardless of what method is used, change will not occur successfully unless the leader communicates effectively and removes the obstacles to attain a learning culture.

Organizational Culture

Culture's Influence.

Another key aspect that all personnel of an organization must understand in the successful integration of a learning organization idea is organizational culture. Without a solid understanding of organizational culture, leaders will be unable to successfully conduct daily business. Furthermore, some have argued that a comprehension of the organizational culture is a critical requirement before initiating change. Colleen Lucas and Therese Kline clearly understood the influence of culture on a learning organization

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[68] Daniel Holden, "The Missing Ingredient in Organizational Change," *Industrial Management* 49, no. 3, (Fall 2007): 9.

[69] Daniel Holden, "The Missing Ingredient in Organizational Change,"…, 12.

when they stated, "[w]hen initiating change efforts, an organization needs to assess and understand what aspects of culture can be facilitators or inhibitor…."[70] If one accepts such, then an understanding of culture and its functions, the levels and types of culture, culture's effects, and the elements of an ideal learning culture are crucial.

Defining Organizational Culture.

Today, the ability to find a clear and agreed upon general definition of culture is almost impossible. Edgar Schein in his 1999 book, *The Corporate Culture Survival Guide* defined organizational culture "…as a cognitive framework consisting of assumptions and values shared by organization members."[71] A few years later in 2010 Schein offered a more complex definition of organizational culture as,

> …as a pattern of shared basic assumptions learned by a group as it solved problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.[72]

Whereas, the *Business Dictionary* defined it as,

> [p]ervasive, deep, largely subconscious, and tacit code that gives the 'feel' of an organization and determines what is considered right or wrong, important or unimportant, workable or unworkable in it, and how it responds to the unexpected crises, jolts, and sudden change.[73]

These three examples show that diverse definitions exist when discussing organizational culture. Despite this, all three definitions do allude to the notion of a shared

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[70] Colleen Lucas and Theresa Kline, "Understanding the Influence of Organizational Culture and Group Dynamics on Organizational Change and Learning," *…,* 286.

[71] Edgar Schein, *The Corporate Culture Survival Guide.* (San Francisco: Jossey-Bass, 1999), 21.

[72] ———, *Organizational Culture and Leadership – 4th Edition* (San Francisco: Jossey-Bass, 2010), 18.

[73] Business Dictionary, "Organizational Culture," **http://www.businessdictionary.com/definition/organizational-culture.html**; Internet; accessed 30 January 2011.

understanding as necessary in an organization. However, the definitions do not outline the function culture serves in an organization.

Functions of Organizational Culture.

Organizational culture performs a series of functions. Greenberg stated that cultures in organizations provide three vital functions. These are "…a sense of identity, produce organizational commitment, and provision of acceptable behaviour."[74] Robbins and Langton agreed on these three vital functions but augmented the list with the idea that organizational culture is a boundary defining role that differentiates one organization from another.[75]

Levels and Categorization of Culture.

The understanding of the various types and levels of culture is another critical piece to organizational culture. A leader must understand that there are aspects of culture that are extremely obvious and some that are less overt. Over twenty years ago, Schein offered one method of differentiating the parts of organizational culture by supporting the ideas of a visible and an invisible layer of organizational culture.[76] More recently, Schein expanded the two-level model to a three-level model that included artifacts, shared values, and underlying assumptions.[77] These three levels offer more flexibility to understand that some parts of organizational culture are impossible to categorize as visible or invisible. It is also imperative to appreciate that an organization may possess

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[74] Jerald Greenberg, *Managing Behavior in Organizations - 5th edition* …, 342.

[75] Stephen P. Robbins and Nancy Langton, *Organizational Behaviour: Concepts, Controversies, and Applications…*, 609-610.

[76] Edgar Schein, "Organizational Culture," *The American Psychologist* 45, no. 2 (Feb 1990): 109.

[77] Edgar Schein, *The Corporate Culture Survival Guide.* (San Francisco: Jossey-Bass, 1999), 21.

more than one culture. The dominant culture provides the overarching guidance for culture in the organization, but subcultures do exist. This is due to functional differences.[78] The type of culture varies from organization to organization as well as internal to an organization. In their 2007 book *Organizational Behavior*, Don Hellringel and John Slocum provided a framework of culture that advocated the existence of four distinct cultures with an organization. The four cultures they believe exist are clan, entrepreneurial, bureaucratic, and market.[79] In an earlier work from 1990, they provided four different cultural characteristics. They were competitive, learning, bureaucratic, and participative.[80] Clearly, it is not easy to categorize an organization's culture or determine all the levels of culture in an organization, but one can determine the effects of culture on an organization.

Cultural Effects.

Despite the difficulty in determining the exact level or type of culture, there exist some general effects that, no matter what, personnel must identify in order to make a change. First, when an organization is undergoing change the current culture might or might not be well-matched with the desired change. For example, Eleanor Glor in her article *Assessing Organizational Capacity to Adapt* demonstrated that there is a significant negative association between the learning organization and a bureaucratic culture, but a positive relationship with a participative culture. Furthermore, she declared that an organization that favours a hierarchy culture, or a culture that utilizes rules,

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[78] Jerald Greenberg, *Managing Behavior in Organizations - 5th edition …*, 342.

[79] Don Hellriegel and John Slocum, *Organizational Behavior* (Mason, OH: Thomson South-Western, 2007), 429.

regulations and orders as its foundation, will be unable to innovate and change due to the lack of intrinsic motivation by personnel. She asserted this because more controlling leaders are indicative of transactional leaders.[81] This idea fits nicely with what one normally associates with a military organization and provides a potential barrier. Second, during another study Lucas and Kline determined that culture is an inhibitor to change or learning.[82] Resistance occurs because of the barriers that exist. This resistance creates defensive routines defined by Chris Argyris as "…any policies or actions that prevent the organization from pain or threat and simultaneously prevent learning how to correct the causes of the threat in the first place. Organizational defensive routines may be inclined to overprotection and anti-learning."[83] Last, culture can have a positive effect on an organization. The positive effects occur when the culture matches the type of culture desired. Sapna Rijal, a Nepalese scholar asserted this in a comparative study of the pharmaceutical sector in India and Nepal when he wrote "…a generative and adaptive organizational culture also has a positive influence in the development of a learning organization."[84] Thus, organizational culture that is defensive in nature demonstrates

[80] Hasan A. Fard, Ali Asr Anvary Rostamy, and Hamid Taghiloo, "How Types of Organisational Cultures Contribute in Shaping Learning Organisations," *Singapore Management Review* 31, no. 1 (2009): 53.

[81] Elanor Glor, "Assessing Organizational Capacity to Adapt," *Emergence: Complexity and Organization* 9, no. 3 (2007): 44.

[82] Colleen Lucas and Theresa Kline, "Understanding the Influence of Organizational Culture and Group Dynamics on Organizational Change and Learning,"…, 277.

[83] Chris Argyris, "Reinforcing Organizational Defensive Routines: An Unintended Human Resources Activity," *Human Resource Management (1986-1998)* 25, no. 4 (Winter, 1986): 541.

[84] Sapna.Rijal, "Leadership Style and Organizational Culture in Learning Organization: A Comparative Study," *International Journal of Management and Information Systems* 14, no. 5 (Fourth Quarter, 2010): 125.

difficulty in its ability to adapt. On the other hand, a positive organizational effect is possible if an organization's culture is compatible with the organization type.

Elements of Learning Culture.

There are crucial ingredients required in an organization's culture in order to support a learning culture. First, an adaptive culture is necessary. In fact, "…a strong culture, which does not encourage innovation, proves to be a disadvantage to a firm."[85] Fard et al. in their article *Shaping Learning Organisations* tacitly supported this idea when they stated that "…culture is widely understood as an instrument to be used by management to shape and control in some way the belief, understanding, and behaviours of individuals, and thus the organisation to reach specified goals."[86] From their analysis one may discern that in order to support the requirements of a new style of organization a change in culture is necessary. Second, transformational leadership is required in a learning organization to foster a collaborative team culture.[87] In addition, the transformational leader must fit within the learning organization culture. Leaders must display and influence behaviours such as achieved-outcome influence, rational-persuasive influence and support influence.[88] In essence, there is a direct link between the leader and the organization in that a transformational leader understands that "…a

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[85] Sapna Rijal, "Leadership Style and Organizational Culture in Learning Organization: A Comparative Study,"…, 120.

[86] Hasan A. Fard, Ali Asr Anvary Rostamy, and Hamid Taghiloo, "How Types of Organisational Cultures Contribute in Shaping Learning Organisations,"*…,* 51.

[87] Zong Dai, Frank. Duserick, and Amy B. Rummel, "Creating a Learning Culture for Competitive Advantage," *Competition Forum* 7, no. 1 (2009): 22.

[88] Department of National Defence, A-PA-005-000 AP-004 *Leadership in the Canadian Forces: Conceptual Foundations* (Kingston: Canadian Defence Academy: Canadian Forces Leadership Institute, 2005), 68.

generative and adaptive organizational culture also has a positive influence in the development of a learning organization."[89]

Summary of Culture.

The culture of an organization is a crucial element in the adoption of a new modus operandi. In order to effect change, a leader must recognize that culture can be somewhat obvious at times and sometimes less transparent. Moreover, it is crucial that a leader be aware that culture is an impetus, as well as an inhibitor for adopting new approaches. Adopting a learning culture is definitely possible but paramount to successful implementation are strong leaders and an adaptive culture within an organization.

Militaries as a Learning Organization

Canadian Army.

To date, there have been few assessments of the Canadian military as a learning organization. From a Canadian Army perspective only one document appeared to be a direct study on the topic. In 2001, as a student on the Canadian Force Command and Staff course, Lieutenant-Colonel Boland compared the ideals of a learning organization against the hierarchical assessment system (the Canadian Forces Personnel Appraisal System) that is utilized by the CF. He determined that "[t]he exclusive use of a hierarchical assessment for the identification of leaders and leadership potential is not

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[89] Sapna Rijal, "Leadership Style and Organizational Culture in Learning Organization: A Comparative Study," *International Journal of Management and Information Systems* 14, no. 5 (Fourth Quarter, 2010): 125.

consistent with the tenets of a learning organization."[90] In order to improve and move closer to a learning organization, Boland recommended the inclusion of a 360 degree review system to make the process more collaborative and one that provides details on the whole person and not just a single view.[91] This is analogous to Senge's systems thinking element that is needed in a learning organization.

United Kingdom and United States Armies.

On the other hand, research did uncover documents that provide an assessment of the United Kingdom (UK) and United States(US) Armies as learning organizations. John Nagl in his book *Learning to Eat Soup with a Knife* compared the experiences of UK and US forces in Malaya and Vietnam. Nagl posited that the aptitude to learn and adapt swiftly may be a vital aspect in the future and "…[i]t is the organizational culture of the military institution that determines whether innovation succeeds or fails."[92] From the UK perspective, the historical roots of the UK Army as a policing force and their lack of doctrine facilitated creativity. This is a key tenet of a learning organization.[93] In juxtaposition, the US Army was resistant to change and reluctant to adapt their processes or mentality and this is evidenced in their strict use of overwhelming force which was one reason they failed in Vietnam.[94] As a consequence, Nagl concluded that the UK

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[90] B.E. Boland, "Hierarchical Assessment and the Learning Organization – An Oxymoron?" (Toronto: Canadian Forces College Command Staff Course Paper, 2001), n.p..

[91] *Ibid*., n.p.

[92] John A.Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam…,* 214-215.

[93] *Ibid*., 194.

[94] *Ibid*., 199.

Army is a learning organization. However, he does not extend that similar appraisal to the US Army.[95]

In 2007 and 2002 respectively, Colonel John D. Williams and Lieutenant-Colonel Stephen J. Gerras provided more recent evaluations of the US Army as a learning organization. Williams utilized Senge's parameters of a learning organization as the foundation of his view that "[b]ased on this study, the five disciplines of the learning organization are not integrated into the [US] Army."[96] Williams believed that the US Army failed to integrate Senge's disciplines to obtain a learning organization status. This is because of poor vision within the Army, poor integration of lessons learned, the lack of frankness and admissions to mistakes created by meritocracy to determine promotions, and the lack of education on systems thinking.[97]

Gerras came to the same conclusion and goes further by laying blame elsewhere. He blamed the incongruence between the Army's desire and its reality of micromanagement. In addition, there exists a fear of failure among leaders. This permeates the Army culture. He believed these issues were the main inhibitors to achieving the status of a learning organization.[98] Even though there is a 30 year intervening period in assessments Williams and Gerras concurred with Nagl's conclusion. Thus, the obstacles observed during the Vietnam War may still exist and

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[95] John A.Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam…*, 213.

[96] John D. Williams, "Is the U.S. Army a Learning Organization?" (Carlisle Barracks: Master of Strategic Studies, 2007), 23.

[97] John D. Williams, "Is the U.S. Army a Learning Organization?"…, 23.

[98] Stephen J. Gerras, "The Army as a Learning Organization" (Carlisle Barracks: Master of Strategic Studies, 2002), 18.

may impede the US army's ability to develop into a learning organization. Thus, the US Army could have difficulty in demonstrating the key advantage of any learning organization – adaptation.

Australian Army.

An analysis of the Australian Army as a learning organization wields vaguely similar conclusions. In a study of the e-learning culture in the Australian Army, Dianne Newton and Allan Ellis proclaimed that "…instructor's beliefs about Army training and cultural factors were impacting on e-learning use and encouraging resistance to change."[99] This is not an isolated claim without others' support. Steven Talbot and Paddy O'Toole also observed in their article *Following the Leader: The Social Character of Learning in the Australian Army* "…that there needs to be an alignment between the organisation's learning ethos…and its culture, structures, goals, as well, as actual learning activities if learning is to occur in a systematic manner."[100] More recent research from Talbot and O'Toole appears to indicate that a change in culture impeded experimentation and innovation.[101] As a consequence, the Australian Army, despite their best intentions to evolve into a learning organization, may face similar barriers to adaptation as the US Army.

Summary of Other Militaries as Learning Organizations.

In the military, the adoption and application of terminology of a learning organization exists. Recent experience however, may not paint a positive image of the

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[99] Dianne Newton, and Allan Ellis, "Development of an E-Learning Culture in the Australian Army," *International Journal on E-Learning* 6, no. 4 (2007): 550.

[100] Steven Talbot and Paddy O'Toole, "Following the Leader: The Social Character of Learning in the Australian Army," *The International Journal of Learning* 16, no. 2 (2009): 357-358.

US and Australian Armies current standing as a learning organization. Both William and Gerras assess that the US Army does not currently meet wholeheartedly the tenets of a learning organization. A similar viewpoint appears to exist from an analysis of the Australian Army. On the other hand, the UK Army's experiences in Malaya provided the opposite image of an organization. During this mission, the army adapted and innovated and, as a consequence, met the requirements of a learning organization.

Chapter Summary

In summary, the concept of a learning organization interconnects with several other aspects of organizational behaviour. There is a direct relationship between learning organizations and areas of study like organization learning, change, and culture. Moreover, these associated concepts are relevant and useful to the modern army in its attempts to evolve to meet current threats. In the end, some assessments of the US and Australian Armies indicate that they may contain systematic barriers which hinder their efforts to become adaptive and innovative. This in turn, may inhibit a learning organization. This leads us to the question from a Canadian military perspective. Do the same issues apply to the Canadian Army?

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[101] Paddy O'Toole and Steven. Talbot, "Fighting for Knowledge: Developing Learning Systems in the Australian Army," *Armed Forces and Society* 37, no. 1 (Jan, 2011): 60.

CHAPTER 3 – OVERVIEW OF LEARNING IN THE CANADIAN FORCES

CF Leadership

Prior to commencing a formal analysis of the Canadian Army as a learning organization, an understanding of the leadership doctrine that the CF employs is but one of two critical framework pieces that will assist in comprehending the environment that exists in the Army. The framework provided by the CF is the basis from which the Army leadership must conform. In 2005, the CF released two new leadership manuals titled *Leadership in the Canadian Forces: Doctrine* and *Leadership in the Canadian Forces: Conceptual Foundations.* These documents provided the groundwork for how to lead into the future. The manual defined leadership as "…directly or indirectly influencing others, by means of formal authority or personal attributes, to act in accordance with one's intent or a shared purpose."[102] From this definition, when compared to Senge's element of shared vision for learning organization there appears to be a link to the idea if intent and shared purpose. Other similarities to Senge's ideals of a learning organization appear in other sections of the manuals.

In addition to this, there are several principles of a learning organization that are evident in the both keystone leadership doctrine manuals. The first concept that is

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[102] Department of National Defence, A-PA-005-000/AP-003 *Leadership in the Canadian Forces: Doctrine* (Kingston: Canadian Defence Academy: Canadian Forces Leadership Institute, 2005), 3.

apparent is a supporting point of view for leadership - systems perspective.[103] The idea

relates directly to Senge's systems thinking discipline. In comparison, the CF relates the

idea of performance and effectiveness and how they highlight the persistence of leader's

direct and indirect influence. As well, influence is a key component of the CF leadership

model and there are several types of influence behaviours outlined that bear resemblance

to a learning organization such as facilitative, supportive, participative, and delegation.[104]

As the CF model illustrates, the attributes on this spectrum of influence behaviours are

ideas of transformational leadership. This leadership form is prevalent in the success of

learning organizations and one that the CF advocates wholeheartedly.[105] The CF is also a

proponent of the idea of an open culture as a supporting condition to the CF philosophy

of leadership.[106] Lastly, several principles of leadership in documents such as achieving

professional competence and pursuing self-improvement, mentoring, education,

developing subordinates, and learning from experience support learning organization

tenets.[107] As a consequence, the leadership doctrine in the CF does not explicitly state

the need to be a learning organization but the supporting concepts in the two key

leadership publications provide sufficient evidence to propose that the CF and, de facto,

the Army's organizational desire to develop a learning organization.

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[103] Department of National Defence, A-PA-005-000 AP-004 *Leadership in the Canadian Forces: Conceptual Foundations* (Kingston: Canadian Defence Academy: Canadian Forces Leadership Institute, 2005), 2.

[104] Department of National Defence, A-PA-005-000/AP-003 *Leadership in the Canadian Forces: Doctrine…,* 20-21.

[105] *Ibid.*, 21.

[106] *Ibid.*, 13.

CF Organizational Learning Strategy

The second critical CF framework piece that will assist in comprehending the Army as an organization is an analysis of the *Department of National Defence/CF Learning Organizational Strategy.* This was originally published in 2008, but updated in the fall of 2010.[108] It is evident in the main and supporting documents of the CF strategy that there exists a desire to become a learning organization through the employment of words like 'ability to adapt' and the 'learning organization'.[109] Moreover, the CF acknowledged the need to accept the strategy despite forthcoming resource restraints so as to more effectively tackle the future tests and prospects facing the organization.[110]

The *Department of National Defence & Canadian Forces Organizational Learning Guidelines* outlined the key aspects of the strategy for all parts of the organization. Particularly, the guideline stated that the organizational learning principles are "…systematic problem solving, experimentation with new approaches, learning from our own experiences and past history, learning from the experiences and best practices of other, transferring knowledge quickly and efficiently, and integration of learning into

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[107] Department of National Defence, A-PA-005-000/AP-003 *Leadership in the Canadian Forces: Doctrine…,* 32-33.

[108] Vice-Admiral A.B. Donaldson, *Department of National Defence/Canadian Forces Organizational Learning Strategy* (National Defence Headquarters: file 9910-2 (DDSM 5), 10 November 2010, 1.

[109] *Ibid.*,1-10.

[110] Department of National Defence, *Department of National Defence & Canadian Forces Organizational Learning Strategy* (Ottawa: Vice-Chief of Defence Staff, 2010), 3.

management practices."[111] These principles bear resemblance to the ideas espoused by both Senge and Nagl.

The CF also recognized the need for an open culture where risk taking is encouraged. This type of culture is essential to develop a learning organization. This strategy was supported when the CF stated that it "…supports risk taking and experimentation and encourages employees to challenge the status quo. Members and employees feel free to share their failures as well as their successes in the spirit of continuous improvement and experimentation."[112]

The same documents recognize some of the tools, methods, and techniques that are necessary to support the strategy. These strategies are knowledge transfer website, After-Action Review (AAR), Lessons Learned (LL), handovers and exit interviews, collaboration, communities of practice, mentoring and coaching, and succession planning.[113] Additionally, the final piece that is essential is the fives roles and responsibilities to be covered by the Chief of Land Forces or Army Commander. This is a key part of this strategy especially with regards to its implementation.[114] It can be suggested that the CF provides sufficient direction and guidance in order to establish a learning organization in the Canadian Army.

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[111] Department of National Defence, *Department of National Defence & Canadian Forces Organizational Learning Strategy…*, 3-4.

[112] Department of National Defence, *Department of National Defence & Canadian Forces Organizational Learning Guidelines…*, 2.

[113] *Ibid.*, 4-8.

[114] *Ibid.*, 15.

CHAPTER 4 – ANALYSIS OF ARMY AS LEARNING ORGANIZATION

Introduction

To assess the Canadian Army as a learning organization several key CF and Army documents and survey results will form the basis. In particular, the analysis covers *The Army: Advancing with Purpose*, *Training for Land Operations*, the last two Army Operating Plans, Land Force Command Order 11-79 *Army Succession Planning*, key Officer Qualification Standards, and the *Officer General Specification*. As well, a further assessment will be performed through survey results of army students attending Joint Command and Staff Course serial 37 at Canadian Forces College (CFC) found at Appendix A and B. While the survey is not a full representation of the Army, the students are the leadership that faces the task to implement the Army's vision and they form the nucleus of the future senior leadership of the Army. Even though, their views are not representative of the complete Army they may help to understand current and future roles. Therefore, their opinions are valuable and can add provide insight into the Army's ability to date and into the future to inculcate the Army with the idea of a learning organization.

The chapter will cover an assessment of Senge's five disciplines of systems thinking, team learning, mental models, building shared vision, and personal mastery. Moreover, as noted during literature review, each question of Nagl's question set complements well Senge's disciplines and will be covered with an appropriate Senge discipline. In the end, the assessment will demonstrate that the Canadian Army has a

desire to become a learning organization, but does fall short of establishing a learning organization.

Assessment of Army

Systems Thinking.

The first of the five disciplines adopted by Senge is systems thinking. He explained systems thinking by a rainstorm analogy and concluded that one can only "…understand the system of the rainstorm by contemplating the whole, not any individual part of the pattern."[115] Nagl believed positive responses to questions on whether Colonels and General Officers (GOs) interact sufficiently with subordinates and are open to conversation, whether subordinates question superiors and polices and if this is common practice, and if the promotion of suggestions from the field occurs is indicative of a learning organization. These questions apply well with the Senge's tenet of systematic thinking due to its holistic basis.[116] However, the real question is if the Canadian Army followed the intended interpretation of this learning organization premise.

The idea of systems thinking or the systems perspective exists in some of the key documents employed by the Army. First, the CF leadership manual that serves as the foundation for Army leadership supports one key point of view for leadership – the

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[115] Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization…*, line 236.

[116] John A.Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam…*,10.

systems perspective. This manual suggests that a holistic view must be undertaken by a leader as this is an important element of leadership.[117] Second, the Army training doctrine is fully supportive of a systems thinking view. In fact, the 2010 version of the Army's training manual *Training for Land Operations* outlined that one of the four key themes is that "…training must be systematic to ensure maximal efficiency and, in turn, to maximize effectiveness…."[118] Moreover, a view of the Land Forces System Approach to Training (LFSAT) and the Army Learning Process (ALP) covered in Table 5-1 and Figure 5-1 in the *Training for Land Operations* provides a clear picture of systematic thinking in action. Third, the basis of the assessment employed by succession planning supports a systems thinking approach. Annexes B and C of *Army Succession Planning* posit the assessment criteria of leaders' potential to work at higher level. The breakdown of the assessments into both qualitative and quantitative domains demonstrates that the Army employs a holistic view of the individual and their future capacity.[119] Thus, the Army, from a process perspective, does support a systems thinking approach.

On the other hand, the processes hide the grim reality, from a systems thinking perspective. These may illustrate that the army is not a true learning organization. First, the process of succession planning is not as truly holistic as it appears. It is true that both qualitative and quantitative assessments exist, but the opinions and the decisions of succession planning are from a superior's view only. An analysis of Part 1 and 2 of *Army*

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[117] Department of National Defence, *Department of National Defence & Canadian Forces Organizational Learning Strategy…*, 3.

[118] Department of National Defence, B-GL-300-008-FP-001 *Training for Land Operations* (Kingston: Directorate of Training, 2010), iii.

[119] Department of National Defence*, Land Force Command Order 11-79 Army Succession Planning* (Ottawa: Chief Land Staff, 2009), 2-6, B-1/2-C-2/2.

Succession Planning indicates that this process favours the command lead and that input from peers or subordinates is non-existent in the process of planning for future Army leadership. A clear indication of this is evident through one of the objectives of the Army Succession Planning (ASP): to "…[e]nable the commander to influence over the short and long term the development of people, and to enable the success of the institution…."[120] This does not provide an outlook of systems thinking or solutions supported by a systems thinking approach. If the leadership is such a critical element of a learning organization then why does the selection process not involve tenets of a learning organization?

The results of the internal CFC survey further support the idea that system thinking is not promoted or supported in the Army. First, less than 60 percent of the officers surveyed were aware of the 2005 manual *Leadership of the Canadian Forces: Conceptual Foundations* prior to commencing their course and less than one third of the officers read the document prior to their arrival. Also, less than half knew that the ALP existed and around 1 in 10 employed the process in the careers. When asked if the Army effectively trained officers to view situations holistically, only approximately a quarter responded positively. Additionally, approximately one quarter surveyed believed that Colonels and GOs adequately interacted and were open to suggestions from subordinates. This response further contradicts systems thinking when only one third believed superiors encouraged subordinates to question leaders and policies. And only half of those surveyed considered that the Army promoted suggestions from the field. It should be noted that an organization cannot deem itself a learning organization when only a portion

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[120] Department of National Defence*, Land Force Command Order 11-79 Army Succession Planning…*, 3.

of leaders employ system thinking, are unaware of the underpinning leadership or supporting processes, and received no proper supporting training. The survey results demonstrated that the primary foundational documents are not well-known, and the systems thinking premise maintained by the documents do not occur in the majority of cases. Thus, despite the leadership documents and various directives from the Army advocating systems thinking, the reality is that they fall short due to weaknesses in processes like ASP, the unawareness of their existence by subordinates, and the lack of support in the messages.

Team Learning.

Another tenet of the five disciplines espoused by Senge is that of team learning. The fundamental meaning of this tenet is "[t]he discipline of team learning starts with "dialogue," the capacity to suspend assumptions and enter into a genuine "thinking together"."[121] Again, Nagl believed positive responses to questions on whether Colonels and General Officers (GOs) interact sufficiently with subordinates and are open to conversation, whether subordinates question superiors and polices and if this is common practice, and if the promotion of suggestions from the field occurs is indicative of a learning organization. These questions apply well with the Senge's tenet of team learning due to its team oriented basis.[122] However, the question that remains is if the Canadian Army follows the meaning of Senge's team learning principles which is an essential part of a learning organization.

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[121] Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization…*, line 299.

[122] John A.Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam…*,10.

Analysis of key Army documents and commonly employed processes indicates thinking as a team or a group is evident in the Canadian Army vernacular. The most evident process supporting team learning for Army officers is their experience at the Canadian Manoeuvre Training Centre in Wainwright and the Combat Training Centre in Gagetown, which utilizes the After Action Review (AAR) as the primary tool for promoting learning.[123] The manual *Training for Land Operations* defines the AAR as "…a professional discussion of a training or operational event that focuses on identifying what happened, why it happened, how it can be improved and how good practices can be reinforced."[124] Additionally, the manual outlined the keys to a successful AAR as involving the leadership and broad participation.[125] In fact, the AAR is one part of the Army Learning Process (ALP) which is "…a simple process which facilitates the reporting of observations and lessons into the Army's Decision/Action cycle. The process can be applied at any level from the Section to the Land Forces Command."[126] Figure 2 below outlines the formal process employed by the Army Lessons Learned Centre (ALLC) and intuitively one can envision team learning at work. The Army demonstrated successes in team learning via the ALP, doctrinally and practically, as exhibited by CANLANDGEN 003/08. The Chief of Land Staff (Army Commander) provided a summarized update on lessons learned from Afghanistan and the actions which needed to be taken to resolve these issues.[127]

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[123] Department of National Defence, B-GL-300-008-FP-001 *Training for Land Operations*…, 6-18.

[124] *Ibid*., H-1.

[125] *Ibid*., H-1.

[126] Army Lessons Learned Centre, "The Army Learning Process," **http://armyapp.forces.gc.ca/ALLC-CLRA/alp-eng.asp**; Internet; accessed 13 February 2011.

In addition, the employment by the Army of the Operational Planning Process (OPP) and its component parts in plan development is evidence of team learning or 'thinking together'. The OPP is a process undertaken by a commander and his staff to assist the commander to decide the best options to attain assigned activities.[128] The fact that it is a group activity speaks well to the idea that 'thinking together' is a crucial activity within the OPP, particularly during course of action development. Most Army personnel with past experience employing OPP can attest to this fact. A simple illustration of the Army's understanding of the power of team learning idea is found in the *Army Strategy 2020.* As noted, "[g]rouping of soldiers with complimentary capabilities will work together more effectively…."[129] Thus, it seems the Army appears to respect the tenet of team learning within Senge's five disciplines of a learning organization.

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[127] Department of Defence, CANLANGEN 003/08 *Army Learning Process Update* (Ottawa: Chief of Land Staff, 2008), n.p.

[128] Department of National Defence, B-GJ-005-500/FP-000 *CF operational planning process* (Ottawa: Dept. of National Defence, 2008), Chapter 1, 10 and Chapter 3, 7.

[129] Department of National Defence, *The Army: Advancing with Purpose* (Ottawa: Director Land Strategic Planning, 2009), 29.
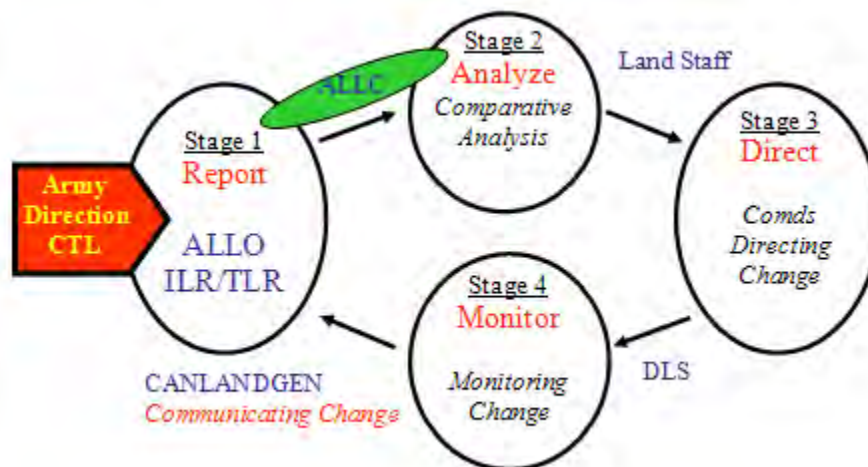
Figure 4.1 – Army Learning Process[130]

In contrast, there is evidence in other documents and processes that suggests the Army does not support team learning. The CFPAS and its Personnel Evaluation Report (PER) and associated word pictures describing the assessment factors (AFs) is non-supportive of a true learning organization. Despite it being an individual report and a tool for improvement, none of the AFs in section 4 or 5 of the PER have any relation to team learning. The AF for 'Leading Change" for Corporal to Lieutenant-Colonel's evaluation possibly involves learning. However, there is nothing in the PER demonstrating a clear, direct statement to team learning.[131] An analysis of the Senior Officer PER form employed for Colonel's evaluation offers no direct linkage to team learning in any of the AFs. Furthermore, the lack of team learning in the ASP, in particular Annex B and C of LFCO 11-79 and the criteria for higher level success, offers the same image of the Army as unsupportive of this Senge's learning organization tenet. The evidence or lack thereof,

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[130] Army Lessons Learned Centre, "The Army Learning Process,"…, n.p..

[131] Department of National Defence, *Canadian Forces Personnel Appraisal System* (Ottawa: Chief Military Personnel, 2009), Chapter 5 Annex A and B; Chapter 7 Annex A and B.

in the area of career management tools, suggests that the Army is not supportive of team learning.

A qualitative assessment of the Army through the CFC internal survey provided further support to the assumption that there is a lack of a team learning environment in the Army. The direct question of collaborative learning and whether the Army advocated such an approach, resulted in less than half of personnel surveyed responding positively to this question. The survey also indicated that subordinates do not believe GOs or Colonels are open to suggestions or encourage questioning of leaders and policies. Again, the responses are more than approximately 50 percent negative to these team related learning aspects viewed as key to a learning organization. Moreover, although the questions were not directly related to team learning, the fact that senior leadership were not open and do not allow questioning from subordinates, highlighted a negative relationship between the Army and team learning. All in all, the survey results demonstrated that the Army does little to encourage or promote team learning.

Mental Models.

The third tenet of a learning organization that Senge advocated as critical was mental models. Senge explained mental models as "…deeply ingrained assumptions, generalizations or even pictures or images that influence how we understand the world and how we take action."[132] As well, he suggested that "…working with mental models starts with turning the mirror inward; learning to unearth our internal pictures of the world, to bring them to the surface and hold them rigorously to scrutiny…"[133] and

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[132] Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization…*, line 263.

[133] *Ibid*., line 276.

"…includes the ability to carry on "learningful" conversations that balance inquiry and advocacy…."[134] One of Nagl's questions highlights the need to challenge the Army's primary assumptions. This applies well with the Senge's tenet of mental models.[135] So one question that remains is does the Canadian Army meet the objective of Senge's mental model principle of a learning organization?

The idea of challenging ways of thinking exists theoretically in the Canadian Army. *Leadership in the Canadian Forces: Conceptual Foundations*, the Army's basis of leadership doctrine, alluded to mental models in the manual's discussion of an open culture. The doctrine stated that "[a]n open culture means that people are encouraged to engage in broad inquiry, to think critically, and to venture and debate new ideas in the interests of contributing to collective effectiveness."[136] Moreover, "…in an open culture, the taken-for-granted assumption about leadership is that people in positions of authority are receptive to upward influence and that no one needs permission to lead."[137] The assumption is that doctrinally, the Army advocated challenges to their current ideas and also accepted ideas from other sources.

Additionally, the *Officer General Specifications* (OGS), the framework for the development of leaders in the CF and Army, provided further impetus to this idea. The OGS demonstrated support of Senge's mental models concept when the document

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[134] Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization…*,line 278.

[135] John A.Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam…*,10.

[136] Department of National Defence, A-PA-005-000 AP-004 *Leadership in the Canadian Forces: Conceptual Foundations…*,126.

[137] *Ibid*., 126.

discussed change and cognitive capacities of the officers. Specifically, Annex B to Chapter 2 outlines leadership's meta-competencies of change and cognitive capacities. As well, Annex B to Chapter 2 discussed the idea of 'thinking outside the box' so that new approaches and solutions would exist as well as a requirement for the requisite leadership ability to support in order to develop as part of organizational learning.[138]

Another document that offers support is the Land Forces Command (Army) Operating Plans for Fiscal Year 2010/2011 and 2011/2012. These documents support challenging the norm and advocates questioning underlying assumptions of the Army. Tacit support for mental models occurs through the provision of, for example, the tasks to Chief of Staff Land Strategy. The operating plans requested proposals for new concepts and the need to examine force employment concepts in the future security environment. It also contained continual reference to the need for the Army to possess adaptable forces in the future.[139] In summary, the Army's last two operating plans, the leadership doctrine, and the OGS would indicate that the Army is supportive of new mental models and, consequently, the idea of a learning organization.

Although there are documents which suggest the army is supportive of new mental models, there are other pieces of evidence that provide an opposing view of an organization that is not open to new mental models. The key standard documentation for military qualification courses which is referred to as Qualification Standard (QS), does not refer to challenging mental models or a learning organization. The QS for two key

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[138] Department of National Defence, *Canadian Officer General Specification* (Kingston: Canadian Defence Academy, 2009), 2B-1-2B-2.

[139] Department of National Defence, *Land Force Command Operating Plan FY 10/11* (Ottawa: Land Staff, 2010), 1-8/10; Department of National Defence*; Land Force Command Operating Plan FY 11/12* (Ottawa: Land Staff, 2011), 1-6/8.

common army courses, the Common Army Phase (CAP) and the Qualification Standard Developmental Period 2 Junior Officer Land Environment Qualification (Army Operations Course AOC), qualifications for new army officers and officers of either Captain or Major rank level, do not make reference to 'outside the box thinking' and fail to challenge the status quo as necessary precursors. This may be viewed as a contradiction when one considers that the OGS refers to these as being requirements for success.[140] The result is a disconnect between the OGS and the Army CAP and AOC requirements. Moreover, Senge's mental models way of thinking is excluded from the QS. This lack of inclusion is at odds with the current Army rhetoric which calls for adaptable forces and the need for creative thinking. This contradiction is more evident when the analysis reveals that these two courses current QS are dated 2003 and 2001 respectively. After eight years, it is difficult to comprehend that the situation remained the same and that no changes were necessary. Moreover, the QS contradicts the "challenge the norms" rhetoric found in the Army operating plans and within the Army strategy in their messaging for adaptable forces due to the more complex operating environment.[141]

The survey results further reflect little support of the Army when considering whether it questions its own assumptions. In fact, less than 2 in 10 surveyed believed that the Army questions itself and the underlying theories they follow. Consequently, despite the desire of the Army wanting to challenge their mental models which are stated in key

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[140] Department of National Defence, *Qualification Standard Common Army Phase* (Ottawa: Chief of Land Staff, 2003), n.p.; Department of National Defence, *Qualification Standard Developmental Period 2 Junior Officer Land Environment Qualification* (Ottawa: Chief of Land Staff, 2001), n.p..

[141] Department of National Defence, *The Army: Advancing with Purpose…*, 23; Department of National Defence, *Land Force Command Operating Plan FY 10/11…*, 1-1/10; Department of National Defence*; Land Force Command Operating Plan FY 11/12* (Ottawa: Land Staff, 2011), 1-1/8.

documents such as the Operating Plans, Army strategy and the OGS, these ideals do not exist in detail in key QS or in the psyche of some Army personnel. This is problematic when attempting to develop a learning organization within the Army.

Building Shared Vision.

The fourth tenet of a learning organization that Senge advocated as critical in establishing a learning organization was building a shared vision. Senge declared that "[i]f any one idea about leadership has inspired organizations for thousands of years, it's the capacity to hold a shared picture of the future we seek to create."[142] It is difficult to think of a successful organization like McDonald's with their 'smiles are free' mantra without a common understanding of the organizational vision. In addition, Senge proposed that this tenet "…involves the skills of unearthing shared "pictures of the future" that foster genuine commitment and enrolment rather than compliance."[143] Nagl believed that there was a need to challenge the Army's underlying assumptions. This connects well with the Senge's tenet of shared vision due to assumptions being a critical element of shared vision.[144] The question is whether or not the objective of Senge's shared vision principle of a learning organization pertains to the Canadian Army?

Key documents and personnel within the Army demonstrate that the rhetoric of building shared vision exists. The Canadian Army exhibits a desire to be an adaptable and agile force which suggests a learning organization. In fact, the Army's strategy document, *The Army: Advancing with Purpose*, adheres to this message well when it

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[142] Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization…*, line 280.

[143] *Ibid.*, line 291.

[144] John A.Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam…*,10.

stated in the Commander's vision section that the Army "…will be strategically relevant to the Government of Canada, as well as operational and adaptive…."[145] The strategy furthers this common depiction of the future in the Core Competencies section by positing that "[t]he Army is an adaptive and agile force capable of rapidly responding to domestic, continental and international threats…."[146]

Other key Army documents reiterate the same message demonstrating consistency and illustrating that this is a common theme of the Army vision. For example, *Training for Land Operations* adopts the same message through statements such as "…training must produce adaptive, ethical and resilient soldiers and leaders…"[147] and "…train to adapt…."[148] This same document further supports the idea of sharing this adaptive vision of the Army by stating that "[tr]aining for land operations must be designed to condition soldiers and, particularly, leaders against surprise and shock and to promote agility, encouraging adaptation to unfamiliar situations."[149]

In addition to these examples, other evidence exists that supports the idea of a shared vision within the Army. The former Army Commander and Commander Task Force Kandahar publically supported a shared vision of the Army as a learning organization. In January 2010 during the introduction of the Army ethics guide "Lieutenant- General Leslie emphasized that the Army is a learning organization."[150]

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[145] Department of National Defence, *The Army: Advancing with Purpose…*, 23.

[146] *Ibid.*, 23.

[147] Department of National Defence, B-GL-300-008-FP-001 *Training for Land Operations…*, 1-7.

[148] *Ibid.*, 1-8.

[149] *Ibid.*, 1-16.

Brigadier-General Vance furthered this message when he stated that "[w]e are a learning organization for practical reasons. If we don't learn, we die, literally and figuratively. The commander and the team on the ground do the best to set the conditions for the next guy because this mission evolves."[151] A clear message was conveyed to be an adaptive force and there was support for learning organization within the Canadian Army. All of this demonstrated support of Senge's idea of building a shared vision in the Army.

On the other hand, the internal CFC survey provided a divergent view. The survey outlined that only 6 of 10 of the respondents believed that the Army fosters an operative vision. This statistic is more positive than previous results, but insufficient to support Senge's concept of building a shared vision in an organization. This is very significant because it is this group of personnel where the future inspirational and fully committed leaders exist. Moreover, to be an adaptive force leaders must challenge the underlying assumptions and must possesses the necessary openness to suggestions, as advocated by Nagl as a key component of a learning organization.[152] Yet the survey conducted provided the opposite view. Less than 4 in 10 personnel believed leaders are open to suggestions in the Army. In addition, only 50 percent believed that the Army promoted suggestions from the field. This implies an Army that is falling short when it comes to creating a vision that is shared amongst personnel.

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[150] Army News, "Army commander rolls out new Army ethics guide," **http://www.army.forces.gc.ca/land-terre/news-nouvelles/story-reportage-eng.asp?id=3929**; Internet; accessed 1 March 2011.

[151] Matthew Fisher, "Canada's commander in Afghanistan: No job like it," http://www.dose.ca/photos/movies/Canada+commander+Afghanistan+like/1585626/story.html; Internet; accessed 1 March 2011.

[152] John A.Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam*…,10.

Building a shared vision is non-existent in other key training documents. The QS for CAP and AOC are also at odds with the messages found in the last two fiscal years Operating Plans, *The Army: Advancing with Purpose*, and *Training for Land Operations*. These two QS provide the standards for the formative education of Army officers from the rank of Second-Lieutenant to Major. Reviews of these documents indicated that they include education on aspects on leadership and ethos, but fail to clearly state the Army's vision or the need and desire to be a learning organization.[153]

This brings some questions to the forefront and sheds light on the army as a learning organization. How can the formative education courses of the Army not include the Army's vision as a key element? Within the Army, it is necessary to convey an awareness of the vision and fully understand key concepts of a learning organization. Unfortunately, this seems to be difficult. Although several key documents like the Army strategy and training manual espouse the idea of a shared vision, the key training standard documents and survey results indicate that building a shared vision, one of Senge's key principles of a learning organization, is not consistently applied.

Personal Mastery.

The final crucial principal of Senge's learning organization is personal mastery. Senge believed that "[p]ersonal mastery is the discipline of continually clarifying and deepening our personal vision, of focusing our energies, of developing patience, and of seeing reality objectively."[154] He furthered this idea by stating that personnel should

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[153] Department of National Defence, *Qualification Standard Common Army Phase* (Ottawa: Chief of Land Staff, 2003), n.p.; Department of National Defence, *Qualification Standard Developmental Period 2 Junior Officer Land Environment Qualification* (Ottawa: Chief of Land Staff, 2001), n.p..

[154] Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization…*, line 248.

"…approach their work as an artist would approach a work of art. They do that by becoming committed to their own lifelong commitment to learning."[155] Nagl's question emphasized the need to challenge the Army's underlying assumptions which connects well with the Senge's personal mastery and the associated idea of lifelong commitment.[156] In addition, the survey question that asked those who believed they are masters of their profession offered an interesting perspective on personal mastery.

At a quick glance the evidence appears to indicate a good fit between the Army and the personal mastery idea of a learning organization. The Army succession planning directive alluded to such support by encouraging personnel "…to engage in their own personal professional development (PG, SLT, continued PD, military and civilian chronicles and journal) to help better serve the army."[157] The Army furthered personal mastery because "…high intellect; knowledge and nimbleness will identify proven committed learners and allow the strengthening of their knowledge beyond their current competencies."[158] Additionally, the PER employed by the Army for yearly evaluation for personnel adds credence to Army support of lifelong learning. The potential assessment factor 'Professional Development' considered the "…evidence that the individual is attempting to enhance knowledge or skills through self-study initiatives and military or civilian courses. In addition, the person accepts tasking that will prepare him/her for the

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[155] Peter M. Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization…*, line 246.

[156] John A.Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam…*,10.

[157] Department of National Defence, *Land Force Command Order 11-79 Army Succession Planning…*, 6/23.

[158] *Ibid.*, 7/23.

responsibilities of the next rank that assesses the leaders."[159] Lastly, the Army strategy

advocated the necessity for ongoing development and learning from experiences links

well with personal mastery.[160]

Yet, the same problem as the four previous tenets is evident in the QS

documentation. Again, it does not offer evidence that suggests the Army is a learning

organization. A problem of the US Army posited by Williams was the employment of

meritocracy for promotion.[161] An analysis of the QS in crucial Army leadership courses

like CAP and the Combat Team Commanders Course indicate that the students of these

courses either simply attended the course or receive a pass/fail. [162] Obviously this

evidence suggests that this is not a barrier when learning in the Canadian Army and

developing a learning organization. However, the AOC QS is a contradiction. It clearly

outlined the need to grade student's performance and noted the final grade in final course

reports.[163]

In addition, survey results provide insufficient evidence that the Army supports

the idea of personal mastery. Results indicated a 50/50 split on the question of whether

the Army enabled personal mastery. The survey indicates no conclusive personnel

support to the idea of personal mastery as part of a learning organization. As a result,

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[159] Department of National Defence, *Canadian Forces Personnel Appraisal System…*, Chapter 5 Annex B.

[160] Department of National Defence, *The Army: Advancing with Purpose…*, 25.

[161] John D. Williams, "Is the U.S. Army a Learning Organization?"…, 23.

[162] Department of National Defence, *Qualification Standard Common Army Phase…*3-2/7; Department of National Defence, *Qualification Standard Combat Team Commander* (Ottawa: Chief of Land Staff, 2001), 1-1/4.

[163] Department of National Defence, *Qualification Standard Developmental Period 2 Junior Officer Land Environment* Qualification…, 1-2-2/4.

Army rhetoric and documents seem to contribute little to Senge's principle of personal mastery.

Chapter Summary

In summary, the documentation developed by the Canadian Army does not indicate an organization either conforming to Senge's tenets or responding positively to Nagl's question set of a learning organization. Some parts of *The Army: Advancing with Purpose*, *Training for Land Operations*, *Army Succession Planning* employ language and ideas that are suggestive of a learning organization while other parts of the same documents provide an incompatible view. This discrepancy of learning organization ideas and principles applies elsewhere as well. There is evidence in the QS for CAP and CTCC, for example, supporting the idea of non-grading. However, other key QS like AOC possess grading factors in final course reports. To date, the evidence suggests that the idea of the Canadian Army as a learning organization exists, but with contradictions that raises questions.

CHAPTER 5 – RECOMMENDATIONS

Introduction

There are suggestions that may assist in developing a learning organization in the Canadian Army. Several organizational behaviorists like Greenberg, Robbins and Langton suggest the primary need to modify an organization's culture.[164] However, the remaining issue is what needs to be changed or modified to create a learning organization in the Army. There are three key areas in the Army that emanate a non-learning organization culture and modifications are crucial in these areas. These include the areas of career management, education, and documentation. Before suggestions are pursued, one key issue that the Army will need to address is whether to modify the Army incrementally or radically.

Career Management Modifications

Modification to parts of the career management system is the first avenue that will provide the Army an opportunity to meet its learning organization objective. To begin, it is necessary that fundamental ideas of a learning organization are evident in the main and supporting documents of the Canadian Forces Personnel Appraisal System (CFPAS) and Army Succession Planning (ASP) processes. As outlined earlier, there is little, if any, evidence suggesting that Senge's five disciplines of systems thinking, personal mastery,

mental models, build a shared vision and team learning are nurtured in these CF documents. In addition there is not overwhelming positive responses to Nagl's question set that relates to these two key processes. Clearly written AFs in the PER within the CFPAS and in the qualitative criteria in the ASP embedding tenets of a learning organization are a necessary element in developing a learning organization. The inclusion of these ideas enables a direct and visible relationship to a learning organization. Thus the performance and potential of the future leaders that occurs from these processes can be increased.

A potential problem is that the CF controls the CFPAS and modifications made to these. An Army suggestion to modify the documentation to include learning organization elements in the PER not only benefits the Army, but also assists with the CF's desire to develop into a learning organization. On the other hand, the Army does control the ASP documentation and associated potential alterations. In order to provide the required priority to adopting a learning organization the inclusion of learning principles and their ideals in the qualitative and quantitative criteria of future leaders is important. This offers the occasion to ensure that the leaders of the future possess a learning organization view and the correct qualities, like transformational leadership, to aid in the development and attainment of this Army vision.

In addition to this, the employment of a 360 degree assessment tool will assist in building a learning organization in the Canadian Army. This idea has been supported and utilized by others. Gerras advocated this approach for the US Army and posited that "…the best way to change the behaviors of leaders is to first identify the desired

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[164] Jerald Greenberg, *Managing Behavior in Organizations - 5th edition …*, 423-424; Stephen P. Robbins, and Nancy Langton. *Organizational Behaviour: Concepts, Controversies, and Applications…*,

behaviors of a leader in a learning organization and then teach these qualities through officer education and self-development programs."[165] The value of this assessment tool is that a more holistic view of the leader occurs. This also links well with Senge's idea of systems thinking.

This option is relatively simple to implement and possesses the added advantage of creating an effective learning behavior outcome. It should be more effective than the current system. As well, the 360 degree fits well with the idea of team learning and advocates personal mastery's lifelong learning foundation. Gerras and Boland proposed that a formal inclusion of 360 degree section in the PER as a more effective method to change behavior and provides a more holistic view of a leader.[166]

There are alternatives that will assist in developing a learning organization in the area of career management. An acceptable alternative is a review of 360 degree reports on leaders by a supervisor prior to commencing the completion of the annual form. Also, utilizing the comments from the report within the PER would assist with career management and be more indicative of a learning organization. Additionally, an option is to use the 360 reports by the Army Succession Board and supporting groups undertaking ASP. The availability of these reports would facilitate a more comprehensive view of the leader and enable systems thinking when deciding the potential of future institutional leaders. Combined, these changes in career management should assist developing a learning organization in the Army.

592-594.

[165] Stephen J. Gerras, "The Army as a Learning Organization" …, 15.

[166] *Ibid*., 16; B.E. Boland, "Hierarchical Assessment and the Learning Organization – An Oxymoron?"…, , n.p..

Army Education Modifications

Change in aspects of career management is not the only viable solution to assist the Army becoming a learning organization. An alteration to some key aspects of the Army education process would provide another impetus for change in the Army. First, the Army needs to develop and foster more 'outside the box' thinking. The Army delivers the majority of its own education. This process inherently creates similar ways of thinking within the military.

The employment of non-military agencies for parts of education is an area that will possibly broaden leaders' horizons and way of thinking. To assist with divergent ways of thinking which is an essential part of a learning organization, more leaders need to obtain their Bachelor and Master level education from outside institutions. As well, the attendance of more civilian counterparts on key CF and Army courses like AOC or JCSP will provide an opportunity for military leaders to exchange ideas and learn other points of view by creating an educational environment of systematic thinking, team learning, and personal mastery.

Another consideration is the abolition of grading and ranking on all Army courses. This is not a new idea as evidenced by courses like CAP and the Combat Team Commander's courses. Such a shift might eliminate competition which fosters and creates individualism. Within the army there is little to no value for individualism. The development of the right type of environment to learn should be the primary aim. This new environment within the education system might effectively support the aspect of

personal mastery and the idea of life-long learning -- essential components of a learning organization.

The final educational recommendation is the insertion of ideas, dialogue and principles in all Army education documents that reflect Senge's five disciplines. The inclusion of apt words supporting a learning organizations in all Army QS and other documents, may aid in embedding ideas in the foundation of the Army's education system Another supportive step would be to include learning organization ideals in key leadership courses. For example, an excellent opportunity to implant the ideas into the pool of future institutional leaders would be to discuss the learning organization tenets during CAP. Furthermore, Army educational documentation must demonstrate consistency with respect to the coverage and importance of a learning organization. A review of all key Army documents may be crucial to accomplish the necessary consistency. Thus, modifications to the Army's education system are necessary in attaining a learning organization, but more generic issues require resolution as well.

Documentation

Two more options may provide further assistance to the educational and career management adjustments. First, the Army requires an organizational learning strategy similar to the one that explains the CF strategy. Such a document would demonstrate to all personnel that the Army strongly believes in the need to be a learning organization. It will also send a clear statement to Army personnel that this is part of the common vision. An added advantage of such a document is that tasks provided to subordinate

commanders demand discussion and action, which more likely facilitates the transmission of the learning organization ideals throughout the Army that are currently intermittent or misunderstood at best. Second, this document serves as a guide for the creation of all future documentation. Referral to the strategy would assist the preparation of documents such as the Army strategy, training manual and QS. It is impossible for these modifications to occur immediately without the guidance from the formal strategy. A review without this would lack focus and result in continued inconsistency. Ensuring that all documents advance the same message creates the foundation in the Army and begins a comprehensive and focused adoption of the concept of a learning organization as the Army modus operandi.

Chapter Summary

In the end, all the recommendations to modify aspects of the Army documentation and processes offer solutions to become a learning organization. Adjustments to the CFPAS and ASP documentation and the adoption of a 360 degree assessment tool should enable future leaders to develop a learning view and inculcate such practices in their day to day activities. Education is another critical avenue to change and there are several options. The adoption of system thinking or holistic views, elimination of competition on courses, and the presence of learning organization tenets in educational documentation are proposed as key elements to change. Perhaps the two most important recommendations are the development of a strategy for Army organizational learning and ensuring those messages exists in all Army documents. In the end, from a system

thinking perspective, it is necessary to adopt the majority of these recommendations so that the Army's culture emanates ideas and principles of a learning organization.

CHAPTER 6 – CONCLUSION

This dissertation's goal was to demonstrate that the Army has yet to attain its objective in becoming a learning organization as well as providing potential solutions in attaining this objective. At this moment, and despite the desires of the Army, the label of a 'learning organization' does not apply sufficiently. This is a result of incongruence in key documentation, processes, and practices. Moreover, it also does not appear to be deep-rooted into the consciousness of some key personnel. The presence of the *CF Organizational Learning Strategy* and its inclusion of learning organization tenets and the supporting leadership doctrine offered an excellent opportunity and the framework for the Army to develop a learning organization. Despite this higher level guidance, the Canadian Army appears to adapt some policies and, in other cases, it is unable to solidify these ideals and principles into the daily actions of the Army's organization.

One does not have to look very hard to find documentation that provides an impression that there are elements of a learning organization in the Army. Aspects of *The Army: Advancing with Purpose*, *Training for Land Operations*, and *Army Succession Planning* employ language that is suggestive of a learning organization. In particular, *The Army: Advancing with Purpose* and *Training for Land Operations* supported the need for adaptation or adaptable forces to deal with the future security threats. This meets the desire of an organization to survive by outthinking its adversary. Second, the Army outlined supporting processes found in *Training for Land Operations* indicative of a learning organization such as the Operational Planning Process, Land Forces Systems Approach to Training, the Army Learning Process, and the After Action Review.

Additionally, the last two Land Force Command Operating Plans repeated the need to possess adaptable forces and two key General Officers publically stated their support for the vision of the army being a learning organization. Moreover, the education of leaders offers an impression that key ideas of a learning organization are part of the day to day activities in the Army. Land Forces Command Order 11-79 *Army Succession Planning* is one area where this exists. As well, the inclusion of a 'Professional Development" factor in the Personnel Evaluation Report furthers the inculcation of the learning organization into the Army.

In contrast to this, there is evidence that fails to offer conclusive support of the Army as a learning organization. The Army does not foster systematic thinking in all areas. The employment of a singular view from a superior for determining a leader's future potential through the ASP and the yearly assessment of performance and potential is not systems thinking at work. These areas also suggest that the Army fails to advocate collaborative learning and demonstrates that team learning is not currently part of the Army consciousness. Moreover, the incongruence between the OGS and QS and the lack of inclusion of team learning and building shared vision tenets in OGS and QS demonstrate that two more tenets are lacking in Army documentation. Last, the fact that less than one third of a course that contains future commanding officers and institutional leaders did not read *Leadership in the Canadian Forces: Conceptual Foundations* nor knew of the existence of *Department of National Defence/CF Learning Organizational Strategy* prior to the course is not indicative of an organization that has developed learning organization ideals.

However, the situation is not dire in the Army. Options are available to mend the discrepancies and embed the principles of a learning organization. From a career management perspective, the application of learning organization tenets in the ASP and PER will aid in resolution of the incongruence. As well, the employment of a 360 degree assessment in the PER and ASP processes may aid the Army in establishing a learning organization. In education, the Army must ensure that key guidance documents, like the QS, contain learning organization ideas in order to infuse these ideas into the daily training activities so they become second nature to all personnel. Last, documentation must exist to provide direction to all the Army with respect to organizational learning and be consistent in the ideas. These changes are not exclusive, but may provide real opportunities for the Army to develop into a learning organization.

In conclusion, the Army cannot claim or argue they are an established learning organization at this time. There is too much contradictory evidence. However, these preliminary findings suggest that the Army is in a development stage. Several major documents do display ideas of a learning organization. Due to the constraints of space and time, further research will be needed to confirm these preliminary findings. This could be accomplished by reviewing all Army QS and conducting a survey of all Army personnel throughout Canada. Studies in these two areas would provide a more comprehensive view, a more thorough approach, and possibly a more definitive answer to whether or not the Canadian Army is a learning organization.

Appendix 1

ARMY AS A LEARNING INSITUTION

Survey Questions

1.   What is your current rank? _____

2.   What was your entry program? ROTP/DEO/OCTP/CEOTP/UTPNCM (Please circle)

3.   Please indicate the number so years and months in the previous ranks. If not applicable leave blank.
          Officer Cadet   ___ years__months
          Lieutenant   ___year___months
          Captain   ___year___months
          Major   ___year___months
          Lieutenant-Colonel   ___year___months

4.   How many years and months of military service do you have at this time? ____

5.   Have you completed AOC or equivalent? Yes or No

6.   Have you commanded at sub-unit level? Yes or No.

7.   Have you commanded at unit level? Yes or No.

8.   Prior to this survey, did you know that an Organizational Learning Strategy existed in the CF? Yes or No

9.   Prior to arrival at CFC, did you know Leadership in the Canadian Forces: Conceptual Foundations existed? Yes or No

10.   Prior to arrival to CFC, did you read Leadership in the Canadian Forces: Conceptual Foundations? Yes or No.

11.   Do you feel that the idea of a learning organization permeates Army culture? Yes or No.

12.   Do you feel your superiors employ transformational leadership the majority of the time?
Yes or No

13.   Did you know an Army Learning Process (ALP) existed? Yes or No

14.   If yes, have you in the past employed the ALP? Yes or No

15.   Are Army officers trained effectively to take a holistic view of situations? Yes or No

16.   Does the Army advocate collaboration during learning? Yes or No

17.   Have you have enough time and support to master your profession? Yes or No

18.   Does the Army foster an effective vision? Yes or No

19.   Do Army Colonels and General Officers interact with subordinates enough and open to suggestions? Yes or No

20.   Are subordinates encouraged to question superiors and policies? Yes or No

21.   Does the Army promote suggestions from the field? Yes or No

22.   Does the Army question its basic assumptions regularly? Yes or No

Appendix 2

SURVEY RESULTS

Question	Yes	No	Other	Percent Positive
5	21	0		100
6	19	2		90.4
7	4	17		19.0
8	5	16		23.8
9	12	9		57.1
10	6	15		28.5
11	7	14		33.3
12	6	13	2	28.5
13	10	11		47.6
14	3	18		14.3
15	6	14	1	28.5
16	10	9	2	47.6
17	10	11		47.6
18	12	9		57.1
19	8	12	1	38.1
20	9	12		42.9
21	11	10		52.3
22	4	17		19.0

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