Leadership Development and Knowledge Transfer

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Abstract
This article provides an applied leadership learning framework to support future leadership development and knowledge transfer in the Canadian Forces. The conceptual framework would support and engender an adaptive learning organizational culture that leverages investment in human capital to support global operational needs. The paper responds to the requirements for future leadership development and learning process for renewal, retention and readiness. The authors’ research and learning process has been instrumental in developing the innovative distance MA Leadership program at the University of Guelph.

1. INTRODUCTION
The purpose of the paper is to provide an applied leadership learning framework for understanding the theory of leadership development, knowledge management and concept of the learning organization. The paper is designed to support the leadership competency required in the Canadian Forces to support Defence Strategy 2020 and Officership in the 21st Century in an era of unprecedented change. Leadership development is not a new topic of study. What is new is the need to align, integrate and mobilize leadership competencies for knowledge management and knowledge transfer in the CF as a continuous learning organization. This leadership culture-change requires fostering an intelligent leadership mindset, knowledge and skills to be prepared for the future challenges of managing knowledge and strategic intelligence to support the CF mission. The leadership challenge is in shifting mindsets and legacy systems about leading that is usually the basis of organizational performance. The traditional leadership approach draws on the military model of managing knowledge and strategic intelligence built around functional specialists who prepare analyses as a basis of senior leadership management decisions on major issues. The emerging model requires leadership competence in knowledge management as a leader-manager responsibility that should become part of the CF learning culture and leadership behaviour throughout the organization. The value of knowledge comes from harnessing human capital and leadership competence wherever in the organization knowledge creation or strategic information is needed. The leadership challenge is to increase the “intelligence quotient” of the human capital of the organization rather than to assume that it is the domain of senior leaders. In a military culture based on command and control it will require a strategic learning process to manage the leadership paradigm shift.

1.1 The Leadership Development Context
In the global context the sharing of knowledge and information has reached a level of participation that is unprecedented in history. Driven by the revolution in information technology and the Internet it is imperative to understand that intellectual human capital not I.T. systems are at the core of value creation in any organization. It is therefore important to understand the concept of a learning and knowledge creating organization to enable highly qualified people as future leaders to succeed in the knowledge-based era. Developing intelligent leadership at all levels requires new mental models and systems thinking for leader-managers to think and act to mobilize and transfer knowledge as a strategic capability and competitive advantage. A place to start is to assess the traditional historical approaches to military leadership and then provide a mental model of the future applied leadership learning framework required for success in the knowledge-based era.

Benchmark studies conducted by the American Productivity & Quality Center’s (APQC) reinforce the pivotal importance of leadership in best-practice organizations. The following represents some of the comparative findings of relevance to this research paper:

- Companies that excel in leadership development grow leaders as opposed to buying them.
- Eighty percent of best practice organizations state that a defining situation in the company led to the (re)creation of the leadership development process.
- Best-practice organizations build leadership development teams by emphasizing the importance of both human resources and business experience.
- Eighty percent always or often use action learning as part of the leadership development process.

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A similar study conducted by Band (1997) of leading Canadian best-practice organizations identified four key characteristics in value creating to support growth: leadership, execution, strategy implementation and, the most important variable, culture.

1.2 Future Leadership Development Requirements

The Department of National Defence has articulated a vision of the future leadership development required in Officership 2020. The strategic objectives include:

- The ordered application of military force
- The application of sound leadership
- Highest standards of professionalism
- An officer who thinks critically
- Embrace and manage change
- The CF as a learning organization
- Career of choice
- Governance executed in a decentralized manner and;

Key Initiatives for leadership development are stated as:

- Ensure intellectual development
- Improve the common body of knowledge
- Develop policy, concepts and doctrine
- Strengthen the military ethos
- Cultivate external relationships and links
- Provide OPD officer professional development flexibility
- Provide organizational capacity and resourcing
- Establish accountabilities, incentives and performance measurement

The future of leadership development as the information age enters the second era requires connecting leadership, learning, knowledge and strategy across the organization. When assessing future leadership development in the Canadian Forces it is important to pose the questions:

i. What is the legacy?
ii. What should be strengthened?
iii. What is needed to develop moral and ethical leadership?
iv. What is needed in learning process and knowledge transfer?
v. What social and intellectual capital is required?

Trust and authority vested in officers is granted because of demonstrated prerequisite leadership and technical skills and the potential to continue to develop as a professional officer. (DND OPS) This is not a new subject and has been culminating in programmatic doctrine manuals detailing procedures for the development, assessment and application of leadership across the full spectrum of military operations and at all levels of the hierarchy.

1.3 Creating the Leadership Development Dialogue

To address the future horizon of leadership development thought-leaders including: Bar-On, Bennis, Cox, Covey, Dalla Costa, DePree, Gint, Goleman, Hall, Huntington, Kotter, Minzberg, Wheatley et al have been included to integrate the interdisciplinary theory into the corpus of knowledge required to support leadership development of the professional officer corps. In the areas of knowledge management, the research integrates the work of Argyis, Cox, Drucker, Edvinson, Handy, Senge, St.Onge, Sveiby and Tapscott. Each of these evolving theories has implications for understanding the arts, practices, styles, traits and behaviour of the leadership competency required in managing the context, relationships and activities to achieve the strategic objectives as stated in Defence Strategy 2020 and Officership 2020. To support the dialogue for creating the leadership required in the knowledge-based era it is useful to understand the foundation work supporting this paper. The applied research is founded on the extensive work of Dr.’s Cox and Walsh in the College of Management & Economics at the University of Guelph in the areas of leadership competency and management development. They have pioneered graduate leadership and management programs that link people, knowledge and strategy with I.T. and the Internet to build the leadership competencies for managing in the knowledge-based era. Evidence of this can be seen in the distance graduate program in leadership at the following website: http://www.csl.uoguelph.ca/

The paper is presented as an applied learning framework for understanding and integrating the broad-based interdisciplinary nature of leadership development and knowledge management in the learning organization as follows:

1. Leadership Development
2. Leadership Competency
3. Learning Organization

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4. Intellectual Capital
5. Knowledge Management
6. Communities of Best Practice
7. Towards an Intelligent Leadership Framework for Knowledge Transfer

2. LEADERSHIP DEVELOPMENT AND THE MILITARY LEGACY

In scope and limitation the paper is limited to military leadership development relevant to a Western democracy such as Canada. Eastern civilizations have their own legacy of military leadership and organizational learning as articulated by Sun Tzu in The Art of War and in the Bushido Warrior Code that sustained military rule and the martial tradition that dominated Japanese culture for centuries, virtually to the present day. Early Western historical perspectives can be found in the writings of Plato’s Republic and Thucydides’ Peloponnesian War who articulated the virtues of leadership in the military and civil context. In the fifth century BC, Thucydides, one of the greatest historians the world has known, said that it is in the very nature of humans to act in the future as they did in the past. Is then the task of understanding the theory of leadership futile? Senior leaders in the private and public sector have been championing change but poor at changing themselves. Reengineering the reengineers to make this happen will require insight, courage and action to transform the military model of leadership development that fosters the openness required for leadership transformation and knowledge transfer.

In more recent military history Clausewitz’ treatise On War had a major influence on identifying the accepted talents of leadership and military virtue (this was developed in the context of the then Prussian army). It is interesting to observe management theory and practice parallels a similar developmental timeline in accepted leadership talents and virtues as found in Weber’s management concept of Prussian government bureaucracy. This observation reinforces the need for the military to open learning to understand the evolving theory of leadership in government, private and volunteer sector organizations.

2.1 The Profession of Military Leadership

More recently, Huntington (1957) provides a historical and comparative treatise on officership and the military as a profession in a context of civil-military relations. The rise of military leadership from monastic, mercenary and aristocracy to a professional officer cadre suggests new leadership characteristics, competencies and capabilities are required to attract, retain and renew a professional officer corps. Huntington posits that the professional officer corps requires developing three core competencies: expertise, responsibility and corporateness a shared sense of organic unity and consciousness of themselves as a group apart from laymen. The process of leadership development is ongoing and the three services of army, navy and air force have distinct traditions and approaches to leadership development that can inhibit or support total force effectiveness in carrying out the CF mission. This suggests the need for connecting learning and transferring knowledge across the three service organizational “silos” to harness intellectual capital and leverage leadership competence as strategic capability.

2.2 Military Leadership Development and The New Competence

As Ignatieff (1998) observes what is evolving is a new interlinked logic and strategy where ethnic war and the modern conscience challenge the military ethos and warrior’s honour. The officer corps of the future will work increasingly in fighting an invisible enemy and trying to keep the peace in hostile cultural environments based on the narcissism of minor differences and the ethics of television. This new context will test the individual character and competency of leaders that often lack learning about managing cultural diversity, ethnic hatred and media manipulation. When dealing with the future context, one can only pose questions, and make observations based on past experience. Will the U.S. military succeed in its fight against terrorism? It has not managed to stop the drug war. The U.S. Immigration Service
estimates that there are 6 million illegal immigrants in the U.S. If traffickers and illegal immigrants have not been stopped, how can terrorists willing to die for the cause be stopped by conventional military leadership methods?

In many respects military leadership is at the philosophical and ethical crossroads of the past, present and future. It needs to find a leadership value path that respects Canada's traditions. Understanding the similarities and differences between Canadian and U.S. military leadership development is a starting point. U.S. professional officer development is based on a tradition of technicism, popularism and professionalism. These three strands represent a different tradition and legacy from Canada's, which is founded on regi-

mental and naval divisional leadership, systems and organizational structure. Understanding the new context brings us to the Socratic leadership problem. The more we learn about leadership, the less we understand about leadership. This poses the question of how does the officer corps transform to lead and manage in compliance with the Canadian Human Rights Tribunal Directive, that provides for the complete integration of women and aboriginal cultures.

3. LEADERSHIP COMPETENCY AND THE MILITARY CONTEXT

This requires asking hard questions about legacy and traditions to attract potential leaders from a multicultural mosaic. If not managed properly this can weaken the esprit des corps, morale and effectiveness. Understanding the past legacy and new context leads to assessing future leadership competency. In a multicultural nation with increasingly few shared symbols and shared sense of national heritage this requires engendering a shared leadership philosophy across the culture.

3.1 Leadership's First Commandment: Know Thyself Dalla Costa (1998) argues that ethical leadership is becoming the defining issue of our time. The ethical imperative for moral leadership in the modern officer corps is required to rebuild trust, integrity and confidence required for knowledge transfer with internal and external stakeholders. The hard lessons of leadership. In practice, leadership is about life itself. When leaders face problems, they face life in complexity, not compartmentalized packages of life. Military leaders need specialized knowledge, they also need wisdom, which is the ability to make the connection to transfer knowledge and make the best use of it. This has important implications for leadership development that requires both tacit and explicit learning, which means that some of it cannot be coded or taught formerly. Lt. General Pagonis (2001) who led 40,000 men and women in the U.S. army in the Persian Gulf War emphasizes the pivotal importance of self-leadership in shaping the leadership equation in leadership in a combat zone. Personal presence in leadership is a vital attribute especially in a combat setting. Pagonis states that leaders are not only shaped by environment; they also take active roles in remaking that environment in productive ways.

This can only be achieved through rigorous and systemic organizational development. The military has developed leadership competency in mastering functional expertise such as supply and logistics. New competencies are required because leaders do not operate in isolation. Self-developing leadership to inspire people with a sense of purpose requires more than new leadership training and leadership fads. The Socratic model of leadership requires that we examine leadership in all its human aspects. Leadership serves to create the moral ground for human endeavour and activity.

Exceptional leaders create learning organizations that support the exercise and cultivation of leadership. The work of the leader, therefore, is both personal and organizational!
Socrates saw leadership as a moral activity. In so far as leadership is other than the brutal exercise of power it must exercise itself in humility to understand followers in the pursuit of some goal. Grob (1984) suggests that leaders without this grounding will find themselves in the service of fixed ideas or causes, and thus agents of the use of power in their behalf. No longer nourished by a wellspring of critical process at its centre, leadership “dries up and becomes, finally the mere wielding of power on behalf of static ideals. Understanding this helps to see an important role of leadership as dialogue and its importance to creating knowledge transfer within a learning organization. In dialogical interactions what distinguishes leaders from followers is the possession by the former of a degree of critical perspective lacking in the latter. The teacher-leader, for example can educate (literally, e-ducere, lead out) only in so far as he or she knows better than the follower the infinite nature of the task of imparting truth. In a learning organization followers are not locked into followership. The very essence of dialogue (literally, dia-logos, flow of meaning) consists in mutual perspectives, which allows for – indeed promotes – the movement of followers into leadership roles. Leaders do not command simply by issuing one-way unilateral directives. Instead leadership almost always involves cooperation and collaboration. These activities can only succeed in a culture that is founded on the core values of trust, integrity and confidence.

3.2 The Evolution of Leadership Competency and Capability

The emerging theory suggests the need for leader-managers who are empowered to think, know and make decisions. Figures 1 and 2 show the evolution of leadership and provide a comparison between management and leadership competency.

3.3 The Difference between Leadership and Management Competency

Bennis (1989) believes the difference between leaders and managers is that leaders master the context, manager’s surrender to it. It’s an attitude at the heart of the organization. This poses critical questions for leadership development:

i. What are believed to be the qualities of leadership?

ii. What experiences are vital to leadership development?

iii. What role has failure played in leadership development?

iv. How has leadership behaviour been learned

v. What leadership is admired in the organization?

vi. What can be done to encourage or stifle leaders?
Basic as these questions are, they generate the thinking and answers, which, in turn lead to an exploration of fundamental concerns: how people learn, how they learn to lead, and how organizations help or hinder progress — or to put it succinctly, how people become leaders. Kotter (1996) suggests that the leadership competency required to lead the culture-change to become learning organizations requires an eight-stage process to create the change and includes:

1. Establishing a sense of urgency
2. Creating a guiding coalition
3. Developing a vision and strategy
4. Communicating the change vision
5. Empowering broad-based action
6. Generating short-term wins
7. Consolidating gains and producing change
8. Anchoring new approaches in the culture

Kotter observes eight leadership errors that can lead to failure and includes:

1. Allowing too much complacency
2. Failing to create a sufficiently powerful guiding coalition
3. Underestimating the power of vision
4. Undercommunicating the vision by a factor of 10 (or even 100 or even 1,000)
5. Permitting Obstacles to block the new vision
6. Failing to create short-term wins
7. Declaring victory to soon
8. Neglecting to anchor changes firmly in the corporate culture

4. THE LEARNING ORGANIZATION AND LEADERSHIP DEVELOPMENT

In the knowledge-based context moving to Era 4 facilitation leadership as illustrated in Fig. 1 will require a leadership culture-change in thinking, knowledge, skills and attitudes to become an agile adaptive learning organization. In the knowledge based-era leadership needs to mobilize people, knowledge and strategy as strategic capabilities. The new reality requires insights as to how leadership, knowledge management and organizational learning can be explained, and how it should be conceptualized, exercised, and mobilized to be applied. Lucier (1997), found that senior executives at many of the largest corporations around the world have embraced knowledge or learning as part of the long term vision to:

i. Transform a business by systemically creating and using the best knowledge throughout the organization
ii. Create a learning organization where individuals continually expand their capacity by nurturing new patterns of thinking and collaborative learning

Based on the above corporate research in discussions with more than 70 leading programs it was identified that effectively managed learning can have a significant strategic impact. It was also identified that less successful learning or knowledge initiatives suffer from four correctable problems:

1. No specific business objective, but only general aspirations like “share best practices” or stimulate collaboration
2. Incomplete program architecture that applies some principles of effective learning but does not build on the linked natural dynamics of organization change and knowledge creation and use insufficient focus upon one or two strategic priorities.
3. Top management sponsorship without active, ongoing involvement

The findings posit that these problems stem from top management’s failure to play its accustomed roles of leadership and management – not because of a lack of commitment or interest but rather because top management recognizes that learning requires new management practices and is uncertain about the role it should play.

4.1 The Learning Organization and Leadership Mobilization & Renewal

St. Onge, (1996) states the learning organization has been described as an organization that has the potential to assist managers successfully address critical change-related issues. What is required to mobilize leadership renewal and organizational learning is a shared vision, mission and strategy. Collins and Porras (1996) identified that vision-driven companies perform 55 times better than the general market and 8 times better than competitors. Further, visionary companies clearly articulate core values and a mission to achieve superior long-term performance. The military can learn from corporate examples. This includes: Hewlett Packard’s “HP way” that guides the
behaviour of the company. Proctor & Gamble (founded 1837), Motorola (founded 1928) and, more recently, Virgin (founded 1969) have sustained growth founded on core values and core purpose to build leadership, learning and performance. The word vision derives from the Hebrew word for breath – ruah. It is not a statement on a wall, it is a spirit that transforms and breathes life into the organization. The learning organization provides an opportunity to breathe life into the CF to propel people, purpose and performance. The evolution of interest in organizational learning can be traced to Michael (1973) in On Learning to Plan – and Planning to Learn. This was based on a survey of managers in fourteen companies with recognized learning activities such as 3M, Hewlett Packard, Corning, Proctor & Gamble, and Shell International.

4.2 The Learning Organization and Knowledge Creation Senge (1990) in The Fifth Discipline: The Art & Practice of The Learning Organization began by exploration of a radical approach to improving conversation within practical management situations. Guided by rediscovering the origins of the word “dialogue” – the Greek dia.logos, “flow of meaning.” He observed that the United States was the first country in our modern era founded on a vision. Is it possible that in some very real sense this vision was born out of a capacity for dialogue?

Compare this with the Chinese definition of “learning:” which literally means, “study and practice constantly.” This illustrates that building a learning organization entails profound cultural shifts.

Senge suggests five new “component technologies” are gradually converging to innovate learning organizations. Though developing separately, each will prove pivotal to the others’ success as they connect people, knowledge and strategy to enhance capacity to build organizational leadership performance. These include:

4.2.1 Systems Thinking: Weiner (1948) is considered a pioneer in systems thinking a conceptual framework, a body of knowledge and tools that has been developed over the past fifty years, to make full patterns clearer to help us see how to change them effectively. Wiener in his theory of Cybernetics applied systems thinking in operations research in World War 2 to improve the rate of success in anti aircraft fire against night bombing raids.

4.2.2 Personal Mastery: Mastery suggests the ancient Greek ideal of Knowing Thyself. Personal mastery is the discipline of continually clarifying and deepening our personal vision, of focusing our energies, of developing patience, and of seeing reality objectively. As an organization’s commitment to and capacity for learning is no faster than the slowest learner. It is important to see the connections between personal learning and organizational learning, in the reciprocal commitments between individual and organization, and in the esprit des corps, core ideology and core purpose of an organization of learners. Here can be seen the connection between Bar-On and Goleman’s concept of EQ emotional intelligence in building personal competence and social competence.

4.2.3 Mental Models: The discipline of 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. This is the psychycological realm of Jung and “archetypal learning.” The dominant military mental models suggest the “Great Man” theory of leadership founded on hierarchy, command and control. The question to pose is what would be the “mental model” for Officership 2020 in the knowledge era?

4.2.4 Building Shared Vision: When there is a genuine shared vision as opposed to the familiar “vision statement,” people are inspired to excel and learn, not because they are told to, but because they want to. The practice of shared vision involves the skills of unearthing and communicating shared “pictures of the future” that foster genuine commitment rather than compliance. In mastering this discipline, leaders learn the futility of trying to dictate a vision. In researching the origins of the definition of “vision” it was found to have Hebrew biblical roots connected to the word “ruah” which translates as “breathing the spirit” in to give life to an organization. This is the fuel that inspires heart, mind and muscle. In the French military tradition this is comparable with “elan” the esprit that inspires exceptional individual leadership against overwhelming odds.

4.2.5 Team Learning: How can a team of committed leaders with high IQ have a lower collective IQ score? Simple, they refuse to collaborate or communicate as a collective unit for the common good. Team learning is vital because teams, not individuals, are the fundamental learning unit in modern organizations. Unless teams can learn, the organization cannot learn. They work together, or wither together. The discipline of team learning starts with “dialogue” the capacity of individuals in teams to suspend assumptions and enter into “thinking together” to enable knowledge transfer and a flow of meaning to discover insights and solutions.
not attainable individually. A good example of this is the potential disaster of Apollo 13 and NASA scientists working as a team to solve a mission impossible situation to recover and bring the astronauts back to earth.

### 4.3 The Learning Organization and Knowledge Transfer

Choo (1998) has advanced the theory of the learning organization. He uses the term the “knowing organization” to assess how organizations use information to construct meaning, create knowledge, and make decisions. Choo’s research provides a holistic view of how organizations use information to make sense, manage learning and manage uncertainty. This is important for balancing tensions in decision-making and managing information. The knowing organization possesses information and knowledge so that it is well informed, mentally perceptive, and enlightened. Its actions are based on a shared and valid understanding of the organization’s environments and needs, and are leveraged by the available knowledge resources and skill competencies of members. The knowing organization possesses information and knowledge that confers a special advantage, allowing it to maneuver with intelligence, creativity, and occasionally, cunning and stealth. By managing information resources and information processes, the knowing organization is able to:

- Adapt itself in a timely manner to changes in the environment
- Engage in continuous organizational learning, including the unlearning of assumptions, norms, and mindsets that are no longer valid
- Mobilize knowledge and expertise of its members to induce innovation and creativity
- Focus its understanding and knowledge on reasoned, decisive action.

Weick (1984) states that an organization makes sense of its environment through four sets of inter-locking processes: ecological change, enactment, selection and retention. These experiences suggest the Greek concept of “metanoia,” which literally means transcendence and a shift of heart and mind. To grasp the meaning of “metanoia” is to grasp the deeper meaning of learning, for learning also involves a fundamental shift or movement of mind. This relates to the basic meaning of a "learning organization" an organization that is continuously expanding its capacity to create its future. For such an organization it is not sufficient to develop training, but to develop an adaptive learning culture. It is this strategic thinking that is the key for transforming Cartesian mechanistic organizations to holistic connected learning organizations that operate, behave and act as communities of best practice. The roots of the modern learning organization go back to Socrates and his Academy that lasted for nine hundred years until forced to closed by a competing ideology — the Christian church. Military leadership is also not immune from the changing socio-cultural, political and legal environment.

### 4.4 The Learning Organization and Aligned Learning Strategy

Rosenburg (2001) researched the e-learning strategies of leading organizations and identified that the failure of learning to get any traction in an organization is often related to the quality of the initiatives themselves. Often the best initiatives create little lasting impact. Leadership strategies are required for knowledge transfer in the learning organization. These are founded on four C’s for success: culture, champions, communications, and change:

#### 4.4.1 Culture

This requires making the leader or direct manager accountable for learning. Individuals are responsible for learning, but that should not take the responsibility away from the leader. Organizational cultures and their leaders are reflections of each other. Building a culture that will embrace learning means building senior level support for that culture. Without support from the top, these initiatives are not doable enough to build the moment and mobilization to transform the organization into one that accepts the need for learning and knowledge transfer.

#### 4.4.2 Champions

First, learning must support specific organizational needs. The Leader must recognize the need to manage knowledge as an asset, not just a cost.

#### 4.4.3 Communications

This is a critical area and leadership must have the competencies to develop policy or strategy around knowledge management and organizational learning. This involves:

- Helping reprioritize learning initiatives
- Creating the proper messages about e-learning
- Preparing recommendations for the discontinuance of training and other programs no longer needed (includes preparing people associated with these programs for the change)
Developing motivational and incentive strategies that support the change

Developing the business case for supporting investment in knowledge management

4.4.4 Change: In the end it all comes back to leadership competence in understanding how to manage knowledge and change management. Delaying change management until knowledge management is deployed can jeopardize the entire initiative. But launching change management prior to knowledge management as a learning organization can enhance its success.

5. INTELLECTUAL CAPITAL, LEARNING, AND LEADERSHIP DEVELOPMENT

The building blocks for the learning organization are intellectual and human capital development. The key to managing IC is guiding this transformation of knowledge into something valuable to the organization. An individual’s thinking, knowledge and skills, if not leveraged remain untapped as an organizational asset. Once that individual’s knowledge is used and shared to create organizational value that asset becomes a part of IC. Intellectual capital comes in many forms. In general it can be divided into three interrelated types:

i. human capital: the stock of usable knowledge, skills and competence residing in organizational members;
ii. relational capital: the organizational value derived from loyalty, goodwill and from satisfied internal and external stakeholders;
iii. organizational capital: the organizational culture, and all forms of intellectual property owned by the organization.

Edvinsson (1997) suggests that intellectual capital is every organization’s number one asset. Learning is what feeds intellectual capital. But learning and training are fundamentally different. Training is typically instructor-led and focused on skills, and is often considered the cost of developing competency. It often involves only passive participation and static content. Learning on the other hand, is about knowledge; it’s self-paced, and it involves active participation and customized content. Instructor-led training does not meet these demands. But if intellectual capital is so critical to survival, we need a solution that retains the investment in training.

5.1 Intellectual Capital as Meaning, Management and Measurement Classroom training is still a valuable part of learning, but this can be enhanced to build strategic capability and this is where e-learning fits. E-learning creates an asynchronous environment to work collaboratively online, which helps link people, knowledge and strategy with best practices across the culture. What an organization needs to know about its changing environment to plan for the future needs to be disseminated organization-wide. Marchand (1997), suggests six major activities help to add value through the intelligence process required for effective knowledge transfer:

- Sensing: involves identifying appropriate external indicators of change.
- Collecting: focuses on ways of gathering information that are relevant and potentially meaningful
- Organizing: helps structure the collected information with appropriate formats and media
- Processing: involves analyzing the information with appropriate methods and tools
- Communicating: focuses on packaging and simplifying access to information for users
- Using: concentrates on applying information in decisions and actions

Each of the stages can involve a team of general managers, staff and functional specialists. As a result, the entire process is as strong as its weakest link and is influenced by the mental models and mindsets that are shared by those involved. The evidence strongly suggests that a consensus approach yields more creative decisions and more effective implementation than individual decision-making. While the intellectual capital of organizations is essential to its survival in the knowledge era, most of them have no idea whether they are building it or actively depleting it and sapping their ability to create value in the new era. Based on prior practices, leaders tend to lead their organizations as though they were made only of tangible assets and yet; the effective management of knowledge capital requires a radically different approach to management and leadership.

Handley (1996) argues that the basic shift is from treating business as a “battlefield” to treating it as an “ecosystem,” from treating corporations as well-oiled machines that are run, not lead, using command and control tactics, and from treating employees as cogs that can be replaced when necessary to improve the machine’s importance. Valuing and measuring intellectual capital will promote organizational learning,
Competence, and capability in the 21st Century. The idea of conducting a human capital audit to profile the organizational competency would provide a behavioural and emotional balance sheet so that an organization can assess strategic strengths and weaknesses to assess its human capital development.

Until now, a definition of intellectual capital (IC) has been elusive. Edvinson suggests IC is not just human brainpower but also found in brand (regimental) names and (symbols) trademarks, even assets booked as historic costs that have transformed through time into something of greater value (for example a CF base purchased a century ago that is now prime real estate). All are assets currently valued at zero on the balance sheet. Getting return on intelligence is the focus of knowledge management.

6. KNOWLEDGE MANAGEMENT AND LEADERSHIP DEVELOPMENT

Knowledge management is best considered in the context of the learning organization, consider Garvin’s (1998) following definition:

“A learning organization is an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights.”

In essence then intellectual capital in the form of knowledge creation can best be described as: the combined thinking, knowledge, skill, innovativeness, and ability of the organizational culture. It also includes the organizations values, culture, and philosophy. Organizations operate using three types of capital: physical capital, financial capital and intellectual capital.

New knowledge always begins with the individual. Making knowledge available to others in the organization is the central activity of the knowledge-creating organization. Knowledge creation and knowledge transfer takes place continuously and at all levels of the organization. Nonaka (1998) makes the distinction between tacit and explicit knowledge and suggests four basic patterns for creating knowledge in organizations. Tacit knowledge consists of “know-how” whereas explicit knowledge consists of “know-why” i.e., formal, specifications or formula. To understand the distinction between tacit and explicit knowledge the following learning taxonomy suggests the individual and organization learning involves the following:

- From tacit to tacit – socialization if knowledge creation
- From explicit to explicit – synthesis of information from different sources
- From tacit to explicit – innovation from tacit applied to explicit knowledge
- From explicit to tacit – revision and innovation to improve best practices
- In knowledge management, all four of these patterns exist in dynamic interaction to build return on intelligence.

6.1 Knowledge Management and Learning as Investment

The National Center on Educational Quality of the Workforce (U.S.) studied more than 3000 workplaces seeking a relationship between investment in education and ensuring productivity. The return on investing an average 10% in employee education versus capital equipment gave a company an 8.6% gain versus a 3.4% gain. Training costs have jumped five times what it cost to train new workers in 1985. Training costs have jumped from $2,000 to $10,000 (U.S.).

Yankelovich, completed a survey on the tactics of reorganization used by top executives, states:

“Most management don’t have as firm a hand on the human aspects of restructuring as they do on finance and technology.”

7. CREATING COMMUNITIES OF BEST LEADERSHIP PRACTICE

Individuals not organizations learn and a foundation for organizational learning is understanding the pivotal role of communities of best practice in knowledge creation.

Researchers from the University of Western Ontario and Athabasca University Centre for Innovative Management have found in assessing the learning outcomes of career professionals working in learning communities the following results that support the benefits of understanding leadership teams and knowledge transfer. These include:

- more analytical interaction with other participants
- heightened ability to think critically about key issues
- more ease in incorporating facts into their arguments
- more confidence in explaining ideas to colleagues compared to traditional classroom learning
This suggests organizations will have to act or get acted upon. The new environment is a “come as you are” fluid context. The victors will be those who can successfully wage continuous operations over a widely dispersed, highly fluid global environment by exploiting a combination of technical and human systems. This new environment has produced a digital elite a new generation of leaders and has revolutionized the way organizations think and act. This new reality states that basically, leader-managers of these organizations have made the transition from the traditional hierarchies and corporate “warfare” mindset of the Industrial revolution to the new best practices of the Digital Revolution and Information Age. The mind shift is from seeing organizations as mechanistic models of command and control to imagining the learning organization as a “community” of best leadership practices. This approach is focused on empowering leaders and followers to make better decisions. These observations have important meaning to future leadership development and the need to develop communities of best practice founded on competency-based learning to manage strategic intelligence and knowledge transfer. Communities of practice have emerged as an effective way of creating, sharing, validating, and transferring tacit knowledge.

7.1 Communities of Best Practice: Leadership Lessons Learned Marchand (1997) observes that leading organizations are now making different set of assumptions about knowledge and strategic intelligence. They no longer view it as a function at all but rather as a process for systemic learning a continuous activity concerned with shaping the future and providing a way to consistently challenge organizational blind spots, hidden assumptions and taboos. There is another difference. The traditional approach draws on the military model of operational intelligence built around a group of key specialists who prepare analyses as a basis for senior management decisions on major issues. The new model however sees intelligence as a general-management responsibility that must become part of a learning culture and behaviour of leaders and managers throughout the organization. Minzberg (2000) suggests that strategic thinking and reflection are more important than strategic planning to take action on: managing the context; managing organizations; and managing relationships.

The need for improved leadership competency is evident in Band’s (1997) study of 438 publicly traded companies. It distinguished four categories of performance in Canadian companies: value mirages 190, value eroders 147, value hidden 19, value builders 82. The study conducted by the University of Ottawa identified four key variables as critical factors for companies to grow: leadership, strategy, execution, and, the most important variable, culture.

Important lessons can be learned from allied military organizations and Government institutions such as the RCMP involved in leadership development and knowledge management to create learning organizations. Best practices are evident in the US Navy Chief of Naval Education and Training – CNET website which provides evidence of an integrated strategic learning initiative that is aligned with the organizational mission. The Internet and enabling technology provides the opportunity for developing communities of best practices to support recruitment, retention and renewal of leadership development to support a global mission. Innovative learning initiatives such as these suggest a strategic imperative for the CF to connect leadership development with organizational learning using enabling technology to support continuous leadership development of the total organization. The connectivity of leadership competence would result in enhanced strategic capability to execute and implement the Canadian Forces’ mission.

7.2 Dimensions of Leadership and Organizational Readiness Turning this vision into reality requires understanding what Litwin and Stringer (1968) call leadership and the organizational climate to assess readiness to learn and act. This is explained in seven dimensions of leadership and the importance of understanding how to assess organizational climates explained in Fig 3. Herzcberg and others have also identified the need for creating healthy organizations to foster motivation and performance. Leadership development, organizational learning and knowledge transfer cannot be sustained in an unhealthy, toxic or diseased organizational environment. A method to assess organizational climate and readiness is a climate survey based on the dimensions listed.

8. TOWARDS AN INTELLIGENT LEADERSHIP FRAMEWORK

Evers, Rush and Bedrow in The Bases of Competence: Skills for Lifelong Learning & Employability, identified a skill inventory based on four distinct combinations that are consistent with the evolving literature which capture the current bases of leadership competency necessary to work collaboratively in the learning organization:

- Mobilizing Innovation and Change: the ability to conceptualize;
Creativity/innovation/change, risk-taking and visioning;

Managing People and Tasks: coordinating, decision-making, leadership/influence, managing conflict, and planning/organizing;

Communicating: interpersonal, listening, oral and written communication;

Managing Self: learning, personal organization/time management, personal strengths, and problem solving/analytic.

Tapscott, (2000) has identified four paradigm shifts that support the need to invest in leadership development and knowledge management. These factors include: information technology, globalization, demographics and collapsing political ideologies. Old leadership thinking about training and learning are not sufficient to master distinct learning culture are its most important assets. Knowledge has become more than a component of what we produce – it’s the main ingredient. How countries, organizations, and individuals uncover that capital in the first place and go on to nurture and leverage it. Knowledge transfer goes beyond formal schooling, to embrace life-long learning that is applicable to work related learning. These are the intangible assets within an individual, an organization and are the assets with value adding potential.

St. Onge (1996) posits that the knowledge era is radically changing what creates value in organizations: the long-term prosperity of organizations will depend to a large extent on leadership’s ability to leverage the hidden value that can now be made explicit by measuring the dynamics of “intellectual capital.” Allee (2001) posits that understanding knowledge is the first step to managing it effectively. Guiding principles to manage knowledge include: understanding: knowledge is borderless; self-organizing; seeks community; travels via language; grows or dies; does not respect imposed rules and systems. It is not surprising, therefore, that knowledge management programs fail.

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**Fig.3 – Dimensions of Leadership and Organizational Climate**

**CLARITY** – How well people understand an organization’s goals and policies and the extent to which they understand the requirements of their jobs.

**COMMITMENT** – How strongly people identify with and are dedicated to the mission and goal achievement.

**STANDARDS** – The perceived emphasis that leaders and management places on high standards of performance and the degree to which pressure is exerted to improve performance.

**RESPONSIBILITY** – The degree to which people feel personally responsible for their work.

**RECOGNITION** – The degree to which individuals feel they are recognized and rewarded for doing good work.

**TEAMWORK** – The degree to which individuals feel they belong to an organization characterized by cohesion, mutual warmth and support, trust and pride.

**CULTURE** – How effectively leadership, culture and strategy are aligned to build strategic capability.
Norton (1996) in evaluating leading organizations readiness to develop human capital found that five issues dominated leadership thinking, these included:

- Strategic skills/competencies – the availability of skills, talent, and know-how to perform activities required by strategy.
- Leadership: the availability of qualified leaders at all levels to mobilize the organization toward its strategy.
- Culture and strategic awareness: awareness and internalization of the shared vision, strategy, and cultural values needed to execute strategy.
- Strategic alignment: alignment of goals and incentives with the strategy at all levels of the organization.
- Strategic integration and learning: the sharing of knowledge and staff assets with strategic potential.

8.1 Leadership Development that Builds Return On Intelligence

What has been missing is a process to integrate leadership, learning and strategy across an organization to build strategic capability. Cox (1997) has developed an applied leadership development framework based on work with MBA students and industry that focuses on developing and aligning multiple intelligences to connect people, knowledge and strategy to build ROI. These are identified as: EQ (emotional intelligence...leadership character), IQ (intelligence quotient...leadership competency) and SQ (strategic intelligence...leadership capability) to build ROI. The reference to “ROI” can mean three things — return on integrity in managing relationships; return on intelligence in managing knowledge; return on investment in managing activities and strategy implementation. The applied learning framework has been used effectively in leadership coaching of professionals in the MBA and Leadership Program at the University of Guelph.

8.2 Leadership Development that Builds Return On Integrity

Using the leadership framework one can see the connection between leadership development, organizational learning and knowledge transfer. This integrated leadership framework supports the need for developing multiple intelligences. An evolving field of leadership study is in the area of emotional intelligence. Goleman (2002) discusses the need for personal competence to determine how we manage ourselves and includes self-awareness and self-management. He also recognizes the need for social competence to determine how we manage others and includes social awareness and Relationship management. These are elements of EQ—the non-cognitive intelligence—that impact leadership character and behaviour traits for ethical leadership development in situational contexts of the leader as: visionary, coach, affiliate, democrat, pace-setter and commander. Bar-On and Goleman’s research suggest that emotional intelligence is the sine qua non for leadership. EQ — emotional intelligence — are non-cognitive factors that influence the character of leadership. This is engendered in attitude, behaviour, style, traits, relationships all essential traits for managing relationships and knowledge transfer. Goleman has served to popularize the area of non-cognitive intelligence in what he calls “emotional literacy.” Bar-On (1997) operationalized the methodology using 15 factors to measure emotional and social intelligence. The Bar-On emotional intelligence profile had been used at the University of Guelph to identify a correlation with emotional profile and leadership performance. The profile enabled undergraduates to assess self-leadership traits and behaviours. Experimental groups in a variety of settings including the US Air Force “Top Gun” pilot school and YPO (Young Presidents Organization) profile sampling of 110 respondents have been similarly conducted. As predicted, the scores from this sampling were high. In fact, the YPO group scored above average on most of the 15 sub scales of the BarOn EQ-i. It does indicate the importance of capturing the emotional...
intelligence of the individual as critically important to building a learning culture that can sustain leadership performance. An example of EQ in leadership development is Jim Channon, formerly a lieutenant colonel in the U.S. Army Task Force Delta. He says three things are missing from almost every organization he has been in: “A sincere desire to love each other in a brotherly way, an ability to incorporate spiritual values in their work, and an ability to do something physical together.” The sentiments may seem threatening and alien, even pointless to some. However if leadership education is about treating people with dignity and valuing integrity in relationships, they are core values that need to be embedded in the leadership curriculum of the emerging organization as an ethical imperative.

The emerging image of leadership is of a leader manager who is both “hands on,” as a day-to-day practitioner of the organizational context, and a leader coach, as the “visionary” and team leader who captures the subtleties of the context. The leader is also a manager who develops and uses multiple intelligences to manage as a pragmatist, rule maker, and doer; and as a leader breathing life into the process of organizational success.

The importance of EQ in recruitment, retention and renewal can be seen in Hampden-Turner and Trompenaars (1993) study of 15,000 managers from around the world and found that receptivity and perspective are essential for leadership and growth.

8.3 Leadership Development that Builds Return On Investment Research into the economic loss of corporate loyalty in North American business is estimated to be between $60 and $70 billion dollars annually. Companies that codified values as a share ethic achieved a 10.2% growth in profits, compounded since 1953, or 1.5 times the growth of the U.S. GNP for the same period. The U.S. GNP in 1988 was 11.7 times greater than in 1953, and the net income of the value-based companies was 24.5 times greater. If organizations recognize the importance of EQ this will help leverage IQ leadership competence as a learning organization.

9. CONCLUSION If EQ and IQ are in alignment, SQ improves, thereby building strategic capability. Future leadership development requires learning strategies that create knowledge transfers focused on people, purpose and performance. This is a research-driven path to leadership renewal, retention, and readiness.
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