IMPROVING WORKFORCE DEVELOPMENT IN THE CANADIAN ARMED FORCES

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AIM

1.   To analyze how Canadian Armed forces (CAF) can better position itself to remain effective within the information age and the constant technological improvements it faces. To examine how work force development can be improved to ensure it remains capable of leveraging technological advancements.

INTRODUCTION

2.   The information age has given western militaries access to an unprecedented range of technological and procedural advances. When effectively leveraged, these technologies create a significant military advantage over adversaries opponent forces. In this complex and unpredictable global security environment, "Canada requires an agile, well-educated, flexible, diverse, and combat-ready military capable of conducting a wide range of operations at home and internationally".[1]

3.   The availability of, importance of, and consequent dependence on technology have been continuously rising over the years. This analysis will look at the importance of strengthening the agility, education and flexibility of the Canadian Armed Forces organization by cultivating resilient leaders and improving training and education for military members.

DISCUSSION

Creating Resiliency

4.   In order to deliver on its mandate and objectives, the CAF must ensure that it can adapt to a constantly evolving global environment. Resilience in a military context can be described as the ability to continue to be effective and the capacity to adapt to change.[2] When looking at it from an organizational perspective, resilience could be described as the capacity of the organization to be responsive to uncertain future events. With uncertainty comes inherent risk, and building a high level of organization resilience can be a key factor in minimizing the risk.[3] It is essential that the CAF invest in the development of organizational resilience in order to stay current in the face of dynamic IT advances and effective in defending Canadian interests.

5.   Trying to develop organization resilience by means of procuring the latest technology and incorporating it into the organization creates dependencies that are difficult to overcome. The first critical dependency would be the acquisition of the technology itself. Based on the current

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[1] Canada, Department of National Defence, Strong Secure Engaged: Canada's Defence Policy. (Ottawa, Ontario: National Defence, 2017) 55, 57

[2] Kenneth E Lane, Thomas J McCormack, and Michael D Richardson, "Resilient Leaders Essential for Organizational Innovation," *International Journal of Organizational Innovation* 6, no. 2 (October 1, 2013): 8, https://search.proquest.com/docview/1446441747.

[3] *Ibid*., 9.

speed and processes of acquisition in the CAF, it is foreseeable that the technology would arrive too late to be effective, leaving the ability of the CAF to react to change at the mercy of the procurement process. A second dependency would be the assumption that relevant technology would be available or even exist. Without the capacity to innovate solutions internally, the CAF would be dependent on resources outside of its control to provide solutions to time-sensitive problems. Based on those two critical potential dependencies, the CAF should shift organizational dependencies onto its people, a resource that it possesses already and can manage.

6.   The United-States Army has been making significant investments in resilience training since early 2010. In a collaborative project, the University of Pennsylvania, the Walter Reed Army Institute of Research and the United-States Military Academy at West Point founded the U.S. Army Master Resilience Trainer (MRT) course.[4] This course was delivered to U.S. Army sergeants, who subsequently delivered it to their respective troops. A study conducted three years later demonstrated that over ninety percent of participants found "the training was helpful and improved resilience competencies that enhanced coping with stressful circumstances".[5]

7.   There are three main characteristics that resilient leaders demonstrate: they communicate effectively, they succeed as part of a team and they are continuous learners.[6] It is those three characteristics that the CAF should promote and develop in its leaders. By using effective communication, resilient leaders create a shared vision that other individuals can identify with and be motivated by during difficult times. Information without meaning is useless. Technology has made it easy to pass on information without meaning, creating an obstacle to achieving effective communication and indirectly impacting resiliency. The continuous use of smart device and electronic communication can lead to poor interpersonal communication skills.[7] Physical presence is key to the development of interpersonal relationships and can play a vital role when applied in a team setting.

8.   The second characteristic of resilient leaders is the ability to work successfully within a team environment. The Government of Canada recognizes the importance of team work, and the positive impacts that it brings to the organization.[8] In 2012, the Canadian government implemented Workplace 2.0, a new workspace concept aimed at not only reducing cost but also provide a modern healthy workspace facilitating team discussions and the exchange of ideas by creating open spaces and dedicated team workspaces. Resilient leaders recognize the importance of strategic networking, alliance and partnership building, and collaboration in solving complex problems.[9] They acknowledge that they do not know all of the answers or own all of the required resources. They also acknowledge that personal and organizational success are not mutually

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[4] Karen J. Reivich, Martin E. P. Seligman, and Sharon McBride, "Master Resilience Training in the U.S. Army," *American Psychologist* 66, no. 1 (2011): 25.

[5] James Griffith and Courtney West, "Master Resilience Training and Its Relationship to Individual Well-Being and Stress Buffering Among Army National Guard Soldiers," *The Journal of Behavioral Health Services* 40, no. 2 (April 2013): 140.

[6] Rebecca Shambaugh, "The Secrets of Resilient Leaders," *Leader to Leader* 2010, no. 58 (2010).

[7] Ed Chacksfield, "Developing a Resilient Mindset," *Training Journal*, (February 2017): 25. https://search-proquest-com.cfc.idm.oclc.org/docview/1894911539?accountid=9867.

[8] Canada, Public Works and Government Services Canada, "Government of Canada Workplace 2.0 Fit-up Standard," (n.p. 2012).

[9] Shambaugh, "The Secrets of Resilient Leaders,"... 42.

exclusive, and are motivated to work with others. Technology staff wants to be collaborators and not simply be followers. They want to be part of the team and contribute to the result.[10] Rigid organizational structure and silos are not conducive to collaboration and detract from the potential gains of collective solution building. Companies deeply involved in and influenced by the evolution and constant change within technology such as Google, Apple and 3M have embraced the model of small teams and solution groups to great success. The flexibility of those teams, supported by knowledge sharing, alliance and partnership building, have made it possible for those companies to demonstrate resilience towards changes in technology.

9.   The final characteristic of resilient leaders is continuous learning. They pursue new knowledge and enhancement of their skills whenever and wherever possible. The importance of continuous learning is recognized by the CAF as demonstrated by the rewarding of points during promotion boards to individuals that complete professional development. However, this professional development is mainly driven by an internal personal motivation, is completed outside of the scope of his or her job, and is not directed by the institution. Continuous leaning must be incorporated into an individual's workload, and promoted as an integral, not optional, part of CAF employment. The establishment of more robust, continuous learning plans for each individual would ensure more equitable access to the benefits of continuous professional development.

10.   Overall, resilience is about developing resource reserves and possessing the knowledge of when to tap into them. The CAF cannot assume that personnel will be able to surge for long periods of time and continuously tap into these reserves without any consequences. Reserves must be generated and maintained. The level of resilience, more than education, training and experience, will determine who will succeed and who will fail.[11]

Learning

11.   As mentioned previously, continuous learning is a key characteristic of resilient leaders. Continuously expanding one's knowledge helps leaders deal with the uncertainty of the future and react effectively to threats. Leaders must be able to adapt to new technologies, and understand the affects they have on how military operations are planned for and conducted. There are two main approaches to developing knowledge in leaders: education and training. Education aims at providing the theory, and nurturing a general understanding and foundation of knowledge.[12] It encourages the use of general approaches to problem solving.[13] Training on the other hand, offers a high proficiency with a specific skill set. It is designed to deliver an expected result through the application of the knowledge within a specific environment.

12.   While the new Defence policy, Strong Secure, Engaged, calls for a well-educated forces, it would be ill advised to focus simply on education as defined above. A doctor that is well

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[10] Michael Maccoby, "Developing Research/Technology Leaders," Research-Technology Management 50, no. 2 (2007): 65.

[11] Chacksfield, "Developing a Resilient Mindset,"... 26.

[12] Risa Blair and Tina M. Serafini, "Training versus Education: ELearning, Hybrid, and Face-to-Face Modalities - a Participatory Debate," Journal of Systemics, Cybernetics and Informatics 14, no. 5 (2016): 37.

[13] John W. Moore, "Education versus Training," *Journal of chemical education* 75, no. 2 (1998).

educated but untrained would not be as effective nor would he or she receive the confidence of patients. It is the same for a military force. Having an incredible amount of knowledge but no practical experience or training would make it extremely difficult to achieve consistently high results. As such, a more holistic view to development is required.

13.   The CAF relies heavily on education to create the basis of knowledge required. Most of the education that CAF members receive is externally sourced, with the exception of the Royal Military College of Canada (RMCC) and the Canadian Forces College (CFC). External institutions are leveraged for their curricula and long-form programs. However, a different approach could maximise the return for both the organization and the members. The stackable credentials approach is the process by which smaller programs or classes are selected from a list of available courses. Once a requisite combination of these courses are completed, the learner can earn a higher-level certification or accreditation.[14] This approach has been gaining popularity with high profile academic institutions such as the Massachusetts Institute of Technology (MIT) and Harvard, both of which have developed platforms that deliver high quality education based on this model.[15] It is not all of the courses included in the classic long-form program that the CAF are looking for, but knowledge in specific areas that are contained within it. Clearly identifying those areas of focus and adopting applications criteria for recruiting based on them, could broaden the pool of potential applicants and make it easier to recruit the right people with the right education.

14.   This approach of stackable credentials also offers a great opportunity for development of already serving members. Focussing on micro-credentials at the post graduate level provides serving members with the opportunity to acquire the required knowledge without having to complete the full long-form program. This approach is lower cost than the long program, and is usually more relevant and timely.[16] In an environment where resources (personnel, finances and time) are limited, the use of micro credentials provides the CAF with a positive alternative for growing the knowledge of serving members and ensuring this knowledge is relevant to the current environment.

15.   As previously stated, education without training is ineffective. The two must be coordinated appropriately if maximal output is to be expected. Training schedules should be individualized, based on previous and ongoing education, and specific to the role that the individual is currently filling. Scheduling training based solely on old tendencies or beliefs that a member should complete a given training at a certain rank or seniority level delays potential gains and reduces the effectiveness of members in their work. "The greatest benefit, after all, stands to be achieved if training is made available to those most likely to master and apply new skills, knowledge and behaviours".[17] It should be the driving force behind scheduling training for members.

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[14] Jan Jones-Schenk, "Alternative Credentials for Workforce Development," *Journal of continuing education in nursing* 49, no. 10 (2018): 449.

[15] *Ibid., 450.*

[16] *Ibid., 450.*

[17] Elaine Wilson, "How to Provide Training," *Training Journal*, (December 2014): 35, https://search.proquest.com/docview/1637239498.

16.   When evaluating new training opportunities for workforce development, the CAF, like most employers has been looking at leveraging technology. Future aircrew training, for example, requires that training "exploit technical advances to maintain relevant and cost effective training and maximize simulation and emulation to create efficiencies and provide the best value".[18] The high cost of high fidelity simulation training has been forcing the development of alternatives in order to maximize the resources that are available.[19] Adopting a best value approach as opposed to the lowest cost possible will help ensure that personnel are trained with the equipment that will enable them to leverage those technological advancements and reduce the potential gaps between the CAF, allies and potentially adversaries.

17.   The integration of learning technology within training is something that must be carefully planned and coordinated. With new capabilities such as the future aircrew training, the integration of the new technology is facilitated by the fact that nothing is currently in place. When technology becomes available that improves upon existing training, it is crucial that change agents be selected and deployed to facilitate the integration. They will also provide much needed influence on the teachers of the new technology in order to facilitate its acceptance.[20] Without this influence, the chances of failing to integrate the technology are increased and critical resources potentially wasted.

CONCLUSION

18.   The CAF is expected to perform to a high level in an uncertain and increasingly complex world where. It must position itself where it can deliver on its mandate. With constant technological improvements, CAF workforce development is only increasing in importance.

19.   This paper explored the concept of increasing resilience among the CAF leaders in order to improve their capacity to adjust to change while maintaining operational effectiveness. The importance of resilience has been endorsed by the US Army, which developed a training program that successfully increased measures of resilience. The success of this program suggests that the CAF could gain from such a program as well. This paper looked at the difference between education and training and the potential for micro-credentials to be leveraged to generate more specific criteria for recruiting, and/or provide a time efficient and cost-effective way to increase the knowledge of serving members.

RECOMMENDATION

20.   Resilience training be incorporated as part of the overall ongoing training program of all serving members.

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[18] Government of Canada, "Defense Acquisition Guide 2016, aerospace systems services," last modified 31 May 2018, http://www.forces.gc.ca/en/business-defence-acquisition-guide-2016/aerospace-systems-351.page.

[19] Clint A. Bowers et al., "The Effectiveness of Narrative Pre-Experiences for Creating Context in Military Training," *Simulation & Gaming* 44, no. 4 (2013):515.

[20] Christopher Masullo, "Change Agents, Opinion Leaders, and Technology Integration," *Distance Learning* 13, no. 4 (2016): 35.

21.   Conduct a study on the potential use of micro-credentials for recruiting criteria and targeted post-graduate training for serving members.

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