





DEVELOPING COGNITIVE LEADERS: CONTINUOUS PROFESSIONAL DEVELOPMENT IN THE CANADIAN ARMY

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Education should implant a will and facility for learning. It should produce not learned but learning people. In times of change, learners inherit the earth while the learned are equipped to deal with a world that no longer exists.

- Eric Hoffer, Reflections on the Human Condition

AIM

1. The aim of this service paper is to investigate potential models of continuous professional development in the creation of cognitive leaders in the Canadian Army (CA) without additional professional military education or formal training. The operational importance of the cognitive leader in today's contemporary environment will be described, and a review of existing continuous professional education systems will be conducted. This paper will then look at how these systems can be adapted to the CA, like its American and Australian counterparts, and recommendations will be made.

INTRODUCTION

2. Presently, it has been recognized that Canada as nation is entering a period where conflict is rapidly evolving and in order to retain it's ability to deliver on its operational requirements detailed in *Strong, Secured, Engaged Canada's Defence Policy*, the CA will need to revisit its approach to professional military education and doctrine¹ to remain a contributing partner with its Allies² across a broad spectrum of conflict. The current construct sees a mixture between formal training in development periods for Officers and

¹ Rouleau, Mike. "How We Fight: Commander CJOC's Thoughts" February 10, 2019.

² Canada. Department of National Defence, *Strong, Secure, Engaged* (Ottawa: Department of National Defence, 2017) 57.

Non-Commissioned Members alike, with Professional Military Education conducted at critical times of the Development Period.³ This system has served in the production of influential leaders who embody the social, ethical and intellectual capacity to face the full spectrum of military activities encountered throughout their career but is costly both in time and money. Further, due to the rigidity of the system and its ability to adjust the curriculum taught, leaders are not exposed to the latest information, tactics, procedures or contemporary thoughts on current issues. This system places the onus on the leader to pursue their professional military development outside of the training institution.

3. This contemporary need for intellectual agility can be addressed through continuous professional development (CPD); specifically, a non-formal and cost-effective approach that realizes the creation of a common knowledge base across multiple disciplines which is accessible to all regardless of rank or trade, fosters professional discussion and disseminates lesson learned promptly. While the CA actively participates in CPD⁴, it lacks a cohesive manner in which to manage and encourage its personnel to undertake the practice. To overcome this challenge, current models of CPD, both civilian and military, will be examined to inform the discussion of, and recommendations for the developmental system of cognitive leaders in the CA.

DISCUSSION

4. The following are discussed:

³ Canada. Department of National Defence. *Canadian Armed Forces Professional Development Framework*. Ottawa: December 13, 2018. https://www.canada.ca/en/department- national-defence/services/benefits-military/education-training/professional-development/framework.html.

⁴ Ibid.

- a. Professional Learning Networks, Community of Practices and Connectivist models of CPD.
- b. Allied approaches to CPD.
- c. Adapting CPD models to meet the needs of CA leaders.
- 5. Professional Learning Networks (PLN) can be defined as a system of interpersonal connections and resources that support informal learning.⁵ PLNs can be separated into two broad categories, information aggregation and social media connections and are based on Web 2.0, enabling access to fellow professionals worldwide. 6 Information aggregation is what it sounds like; a system is used by the professionals to remain current on new information through the use of Real Simple Syndication (RSS) feeds to a single web site, from multiple platforms and sources. These RSS feeds are user-defined, allowing the user to select topics of "value and interest" and receive updates through a "push" method, enabling the user to scan through hundreds of articles in a single location without having to spend time looking at multiple websites. The social media connections use existing platforms such as social media (Twitter, Facebook), dedicated interest-based group sites (Wikispaces) to online chat rooms to deliver CPD in an interactive, non-time bound manner. This category enables a collection of experience and knowledge to be leveraged when to develop possible solutions to problem sets. Typically, most PLNs are a combination of both categories resulting in a single repository where the user can access

⁵ Torrey Trust, "Professional Learning Networks Designed for Teacher Learning," *Journal of Digital Learning in Teacher Education* 28, no. 4 (June 2012): 133–38.

⁶ Ibid.

⁷ Colwell, Jamie, and Amy C. Hutchison. "Considering a Twitter-Based Professional Learning Network in Literacy Education." Literacy Research and Instruction 57. Issue 1 (January 2018): 5–25.

"support, new ideas, feedback, collaboration opportunities, and conversations focused on practical solutions." Examples of this model can be seen in the education profession, with sites like Classroom 2.0.9

6. Communities of Practice are defined as groups of people who share a concern, set of problems or a passion for a topic that deepens their knowledge and expertise in this area by interacting on an ongoing basis. ¹⁰Communities of Practice are not a new idea in the realm of CDP but has been reinvigorated through mediums accessed, such as Web 2.0. In their article, "Shared knowledge, "glitches," and Product Development Performance."

David Hoopes and Steven Postrel indicate the performance of programmers increased when they had access to a repository of knowledge and utilize professional relationships to solve problems, resulting in fewer "glitches" and stronger adherence to prescribed timelines. ¹¹ Now common amongst professionals, there are three main characteristics of this model that require to be considered for CPD. First is the shared domain of interest, which acts as a guide, and the community has specialization in, the second is that the community shares and learns from itself and finally, a common practice is cultivated with the end state of refining tools, practices and knowledge. ¹² It should be noted that multiple communities of practice can exist in a profession with no overlap, creating "stove-pipes"

⁸ Torrey Trust, "Professional Learning Networks Designed for Teacher Learning," *Journal of Digital Learning in Teacher Education* 28, no. 4 (June 2012): 133–38.

⁹ Watanabe-Crockett, Lee. "The Best Tools for Nurturing Your Personal Learning Network." *Wabisabilearning Learning* (blog), 14 September 2018. https://www.wabisabilearning.com/blog/8-tools-personal-learning-network.

¹⁰ Wenger, Etienne, Richard McDermott and William Snyder. *Cultivating Communities of Practice: A Guide to Managing Knowledge*. Boston: Harvard Business School Press, 2002.

¹¹ Hoopes, David and Steven Posterel. "Shared Knowledge, "Glitches," and Product Development Performance." *Strategic Management Journal 20*, Issue 9 (September, 1999)

¹² Wenger, Etienne and Beverley Traynor. "Introduction to Communities of Practice." Wenger-Traynor. Website https://wenger-trayner.comintroduction-to-communities-of-practice/; Internet; Accessed October 20, 2019.

of knowledge, and it is up to the practitioner to cross-pollinate ideas and experience between communities. The value that is intrinsic to this model of CDP is unique when dealing with knowledge-based issues. The community can connect pockets of expertise with isolated professionals; diagnose and address problems who root causes cross team boundaries; analyze the knowledge-related sources of uneven performance across units conducting similar tasks. The community works to bring everyone up to the highest standard, and link and coordinate unconnected activities and initiatives addressing a similar knowledge domain. An example of the community of practice model can be found in a military unit itself. An example of the community of practice model can be

- 7. Connectivism can be defined as a model in which learning is a process that occurs within primarily digital environments focused on connecting learners to enable learning. The connections that enable learners to gather and share information are more important than the individuals' current states of knowing.¹⁵ The central pillars to connectivism are recognized as the following¹⁶:
 - a. Learning is a process of connecting specialized nodes or information sources;
 - b. When specialized nodes and information sources are composed of digital, electronic, online resources, learning and technology and inextricably linked;
 - c. Learning, and consequently knowledge, rest in diversity of opinions;

¹³ Wenger, Etienne, Richard McDermott and William Snyder. *Cultivating Communities of Practice: A Guide to Managing Knowledge*. Boston: Harvard Business School Press, 2002.

¹⁴ Greer, James K. "Self-Development of Army Leaders: A Connectivist Approach." Doctoral Dissertation, Walden University, 2015.

¹⁵ Ibid.

¹⁶ Dunaway, Michelle. "Connectivism: Learning Theory and Pedagogical Practice for Networked Information Landscapes." *Reference Services Review* 39, no. 4 (November 15, 2011): 676.

- d. The ability to perceive connections between numerous perspectives, opinions, and concepts is central to learning;
- e. Developing and maintaining connections is necessary in order to facilitate continuous learning;
- f. Evaluating information before engaging with that information is a meta-skill that is applied before learning begins. These evaluative decisions regarding the worthiness of learning specific information represent a learning process.

The idea behind the connectivist theory is development and learning takes place when connections are created, and this development strengthens the significance of connecting ideas

8. In 2017, the Australian Chief of Army Lieutenant General Angus Campbell recognized the requirement for CPD within its ranks and issued clear direction in the form of a strategy paper titled *Evolving an Intellectual Edge – Professional Military Education for the Australian Army.* ¹⁷ In the report, it is recognized that the Australian Army will remain a small fighting force, with the current technological edge shrinking as adversaries increase capabilities and potential be required to conduct operations in a highly technical battlespace ¹⁸. To guard against this future, Lieutenant General Campbell posited an intellectual edge is required and lays out his plan to achieve his desired end state. A result of this direction was the creation of The Cove, an online professional development network based on the theory of connectivism. ¹⁹ It is a method used by the Australian

¹⁷ Campbell, MGen Angus. "Evolving an Intellectual Edge. Professional Military Education for the Australian Army." n.d. 2017.

¹⁸ Ibid.

¹⁹ The Cove Website. https://cove.army.gov.au; Internet; Accessed 13 October 2019.

Army to connect its members in a PLN, facilitating the interaction and sharing of experience and knowledge.

- 9. The Cove contains a variety of media to facilitate the encourage thought and discourse on topics deemed relevant by peers. The use of videos, podcasts, blogs and academic papers to encourages CPD with all types of learning styles, leveraging Web 2.0 technology to connect soldiers with knowledge regardless of their location. By design, the CPD is self-guided, with the members navigating through the site that is divided into the general parts. The first section is the professional mastery toolset, a quick reference resource to aid in the day to day realm of the profession of arms. ²⁰ The second section is described as "...four channels that seek to draw you into a community based on your level of military experience and leadership." ²¹ with the goal of creating focussed discussion on relevant topics. The third and final section relates to foundations or "core" skills required by all members of the Australian Army, such as communications and professional relationship building. This may be the section of most significant importance, as the CPD community relies heavily on its members to contribute thoughts and analysis to continue to grow in both size and depth of experience.
- 10. The United States of America Army (US Army) employs a different approach to CPD than that of Australia. Where The Cove uses a connectivist approach to create PLNs, leveraging Web 2.0 and online communities to provide professional development at the

²⁰ The Cove Website. https://cove.army.gov.au; Internet; Accessed 13 October 2019.

²¹ Ibid

pace of the member, the US Army utilizes both an online community of practice with the added ability to visit in locale to provide mentorship within a specific unit or group of leaders. The *Center for Junior Officers* one example of this version of CPD.²² It consists of the online community with the ability to develop training programs tailored to the needs it subscribers. Similar to the Australian approach, the site contains several functional areas, ranging from reference material to blogs to online communities of practice in the form of forums with specific themes. It differs with the use of an exportable approach to leader development, and begins to leave the sphere of CPD and moves into formal training as it becomes time-bound and places limits on the size of the target audience. While this migration from the online realm to the physical instruction has its drawbacks as noted, it presents an opportunity to increase the PLN of each soldier. It will ultimately be a benefit to the overall system.

11. While there are differences in each system, a strong sense of professionalism and maturity is required to both encourage thoughtful analysis and discussion, where disagreement does not equal dissension. Further, each system has a robust online presence in both social media and other online CDP sites, both academic and leader-led. This is key as it enables the growth and support of the PLNs and allows for cross-pollination of ideas across national identities, experiences and academia, ultimately providing the intellectual edge alluded to by Lieutenant-General Campbell.

²² Junior Officer. Website. https://juniorofficer.army.mil; Internet; Accessed 15 October 2019.

12 As Commander CJOC has expressed it in "How We Fight: Commander CJOC's Thoughts," the Canadian Armed Forces (CAF) has a requirement to develop an adaptable force to meet the current threat vectors in the contemporary operating environment using the assigned resources.²³ For the CAF to do this, specifically the CA, selecting an appropriate model for CPD is vital to facilitate the growth of leaders. Upon examination of the three types of CPD and our Allies employment of each, the CA does not have to start from the beginning to create its version. Currently, there are multiple platforms for CPD, such as the Canadian Military Journal, a quarterly publication and the professional journal of the CAF²⁴ as well as multiple schools like the Canadian Forces College, under the Canadian Defence Academy. Students who attend these institutions prepare various papers on current issues facing the CAF and attend lectures by various academics, professionals and leaders that spurs excellent discussions but only locally, missing a key opportunity to share the knowledge. The natural evolution for these publications, lectures and symposiums, and it is in line with the current theory of CPD, is adopting an online presence where this CPD is made available to be consumed analyzed and discussed using an approach similar to the Australian Army. Under the purview of the CDA who is tasked with professional development with the CAF, the system which provides the medium for the CPD can be championed and maintained. To further leverage existing professional development networks, it would be prudent for the CA to engage with first, its Allies and second, existing professional networks. The professional networks such as online blog

²³ Rouleau, LGen Mike. "How We Fight: Commander CJOC's Thoughts" (February 10, 2019).

²⁴ Canadian Military Journal. Website. http://www.journal.forces.gc.ca/index-eng.asp; Internet; Accessed 17 October 2019.

sites can be used to develop partnerships and provide a greater depth of CPD to its members.

CONCLUSION

13. The nature of conflict has changed, and to achieve success, leaders in the CA will need to remain flexible in thought and processes, incorporating up to date processes and information throughout all missions. In order to accomplish this task, a CPD program is required outside of formal training and military education, with a low cost/high benefit ratio. As a profession, the CA can learn from peers such as its international allies as well as professions outside of military matters to examine which system of CPD would be the best to meet its needs. When selected, the CPD system needs to championed, and information must remain relevant to issues facing the CAF through stewardship of the medium and active engagement by leaders and soldiers to maximize its use.

RECOMMENDATION

14. To ensure the successful adoption of a CPD system within the CA, the following is recommended. First, socialization the concept with the chain of command that CPD is required, effective and low cost to garner support to examine what would work best for the CA. Second, gather requirements from the CA leadership, the field force, the CAF as an institution for crucial information such as accessibility, content and ownership of the proposed CPD system. Third, connect with allies and professionals to avoid known pitfalls in selection and design a system. Fourth, the selected system must be accessible across all forms of technology and open to all members of the CA. Resources such as libraries and collections of professional papers need to be available to avoid uninformed

discussions. Finally, CPD must be encouraged by all leaders and the system must continually be promoted to avoid becoming irrelevant through lack of recognition and use.

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