

THE CF IT&E SYSTEM IS OVERDUE FOR CHANGE

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Ready for Change

The next decade will witness massive changes in the conduct of education and training for the Canadian Forces (CF); it is only questions of ‘when’ and ‘how.’ Changes, when they come, will be driven by great need – the Chief of the Defence Staff himself has said that he cannot afford the present system¹ and also by great opportunity. Strong currents in the wider world of education – new technologies, new methodologies, and the characteristics and attitudes of a new generation – all drive radical change in the way people are taught. The Canadian Forces has not been immune to these pressures, but has been slow to profit from them, with many members taking the conservative view that these are ‘experiments’ that might, in the fullness of time, have some relevance with respect to ‘the way we do things.’

Currents of Change

A lot has already happened. Consider the following:

- In less than a decade, we have progressed from the view that “Distance Learning (DL) cannot substitute for face-to-face,” to a more sophisticated understanding that while some training can only be done face-to-face, some training can be distributed. In some cases, DL is even seen to be the preferred method. More frequently, modern blended learning brings DL tools and methodologies into the classroom. What was once impossible, and then merely expensive, has become both efficient and effective. Examples abound, not least the army’s extensive use of synthetic environments, and the use of Computer Aided Exercises (CAX) and simulation at many CF schools,² and the widely used defence learning capability based upon the Canadian Defence Academy’s DNDLearn. The time has come to take the next step and adopt blended learning as the default approach, and then to reap the resulting economies.
- Since 1990, there have been serious recommendations to make greater use of Canada’s community colleges and cégeps to provide technical instruction for the Canadian Forces. Only the navy has accomplished this seriously to date. The Maritime Engineering Technician Training Plan (METTP) and the Naval Combat Systems Technician Training Plan (NCSTTP) offered by the CF Naval Engineering School (CFNES) detachment at the Marine Institute of Memorial University (MUN/MI) offer many wonderful lessons. This program has run successfully for more than

twenty-five years, the last fifteen in St. John’s, Newfoundland, and it provides ample evidence that concerns with respect to loss of professionalism are grossly exaggerated.³ The long-term success of the METTP soundly puts paid to the intuitive notion that technicians trained to civilian standards are more likely to desert the CF for richer pastures. More recent programs delivered at other Canadian community colleges are equally promising, even if they have provoked visceral opposition in some quarters. Here too, the time has come to take the next step by adopting community college/cégep certification as the baseline, and reconfiguring CF schools and curricula to align with the substantial production capacity that the national system provides. The necessary accommodation for those entering trades via occupational transfer provides no impediment to this principle.

- It has been obvious for some time that long-term success in Afghanistan, or in future conflicts of a like nature, will depend upon more than the simple application of armed force.⁴ Canada is learning that building stability and security necessitates the intimate involvement of both diplomacy and development, and there are growing demands for greater inter-agency training and education. There is good work to be done at home, but also in the field. The Afghan armed forces and police forces will need to be learning organizations in much the same way that Canada’s armed forces are a learning organization. Training and education (T&E), as well as sustained learning support, cannot be an afterthought. The time has come to recognize the potential of Canada’s defence education structures to contribute substantially to reconstruction and long-term stability in emerging democracies.⁵ Canada’s legacy in Afghanistan could be much worse. On the domestic front, there is much collaborative interagency work to be done to ensure optimum synchronization between the CF and its primary partners, such as the Coast Guard, the RCMP, the Border Agency and others.

A Need for Synchronized Management

Recruiting (and retention), career-long T&E, and career management are not separate activities, but are inextricably linked, and they must be managed, at the least, as a modular structure with appropriate rules for interfaces. Here too, the navy’s experience at MUN/MI, and previously at Rimouski, Quebec, provides useful illumination. Marine technicians are best recruited from areas where the marine culture is strong, and are best trained by folks who have the ‘sea in their blood.’ The

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CF has long recognized that the centralized recruiting system will not produce enough recruits into this relatively small but vital profession, and it has therefore provided CFNES both the mandate and resources to go where maritime recruits can best be found. The key lesson here is that there is a connection between training and recruiting that can be exploited to good effect.

Management of modular networks, the modern industrial or commercial equivalent of Mission Command, was developed first in the computer industry from a critical need to coordinate many independent and sometimes competing companies to design, develop, build, and market complex systems. It has been spectacularly successful,⁶ resulting in an open market where the best return on investment delivers the highest value products. The underlying principle is simple, recognizing that separate organizations with distinct missions and objectives contributing to a common end but without a defined command and control structure must nonetheless have rules that govern the interfaces and interactions among these organizations. The phrase "... separate organizations with distinct missions and objectives, contributing to a common end ... without a defined command and control structure..." is a fair description of CF T&E. Without an effective set of 'design rules' to ensure smooth coordination among the managing authorities, these have developed as widely recognized and broadly criticized 'stovepipes.' The existing 'closed' system has done surprisingly well in spite of its 'balkanized' structures, but there are substantial rewards to be gained from the intelligent adaptation of modern modular design principles.⁷ Not the least of these is a manageable framework for experimentation in this era of the 'net' generation and rapidly changing times.⁸

These same observations can be justly applied to CF recruiting, training and education, and career management. A successfully integrated framework will recruit vigorously, train economically and efficiently, and provide attractive career incentives, based upon the obvious fact a CF member has but one life to live, and one career to manage.⁹ Integrating that management is the key.

Conclusion

Despite its challenges and with all its flaws, Canadian Forces training and education is a remarkably successful system. None would dispute that we produce very fine soldiers, sailors and air personnel. This is not a 'broken' system, but it is not particularly modern, and it is far from being optimized. Today's opportunity lies therein. Effective change will demand leadership and insight, and both are available now in abundance. Whenever the decision to act is taken, the positive effects will be felt almost immediately. Throughout the CF, there exists an eager constituency for change that needs only clear intent and good guidance to sweep quickly around the entrenched points of resistance – much like the Canadian Army did at Caen during the Second World War.¹⁰ A lot can be done very quickly indeed, with very little expenditure. Consolidation will take time, of course, but the essential infrastructure and knowledge are already in place or are readily at hand.

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NOTES

1. This is widely interpreted to mean that training takes too long, requires too large an institutional footprint and too large a training cadre. In some cases, it means that it costs too much money. All of these statements are true to some extent.
2. *A Contemporary Training Environment for the Canadian Forces*, Major T.P. Workman, Canadian Military Journal, in press at this time.
3. The program has had some unintended benefits. More than a quarter of MARE officers are graduates from METTP, and they are considered by many to be among the navy's best officers.
4. See: "Brains not Bullets – How to fight future wars," in *The Economist*, 27 October 2007; and "Afghanistan and Iraq – Must they be Wars without End?" in *The Economist*, 15 December 2007, for some interesting commentary along these lines.
5. The NATO-PIP Political-Military Steering Committee (PMSC) was briefed in February 2008 on the CDA-led project to develop a reference curriculum for Defence Institution Building. The PMSC applauded and soundly endorsed this first successful realization of a multi-national curriculum that has real potential to contribute to long-term stability in emerging democracies.
6. See: Carliss Y. Baldwin and Kim B. Clark, *Design Rules, The Power of Modularity* (Cambridge, MA: MIT Press, 2000); Raghu Garud, Arun Kumaraswamy, Richard N. Langlois (eds.) *Managing in the Modular Age* (Oxford, UK: Blackwell, 2003).
7. The existing set of Policies, DAODs, and Instructions serve as a set of "design proto-rules" that could, with appropriate and wise guidance, be shaped into an effective framework. A related issue is transience. Governance of IT&E has too often been the responsibility of senior councils with few members who have sat for more than one year. The professional development councils of the early 1990s were far too cumbersome, but they did have the advantage of some corporate memory.
8. When things change rapidly, it is the modules that best understand the nature of change, and it is the modules that are best positioned to experiment with change. Coherence and compatibility are ensured through the set of design rules.
9. Recent statistics suggest that although CF Recruiting Group has met and even exceeded its recruiting targets for 2007, the net growth for the CF has been nil. This is clear evidence of a negative feedback cycle familiar to any student of Senge [Peter M. Senge, *The Fifth Discipline: the Art and Practice of the Learning Organization* (New York: Doubleday, 1990)]. It is particularly nasty, because the recruits are largely untrained and the losses represent precious experience and knowledge. Too many good personnel leave the CF quickly with a bitter taste in the mouth, provoked by a perceived 'take it or leave it' attitude from the career management system. Career and training policies must be found and adopted to staunch the bleeding, or all the labours of the Recruiting Group will be in vain.
10. The Canadian Defence Academy was originally conceived as a direct report to the CDS, so that it might have the leverage to effect real change. That proved to be a step too far, and thus, CDA was constructed as one player among many. The academy has nonetheless made real progress over the six years of its existence, much of it by seeking out and drawing on that constituency for change.