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Nurturing The Australian Military Mind: A Considered Assessment of Senior Professional Military Education

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Abstract

The topic of Australian Professional Military Education is rarely explored in the public arena. Based on recent fieldwork, this paper compares and contrasts the Australian experience of senior professional military education with comparable institutes in North America and the United Kingdom. It draws a number of observations about the purposes of military education, in particular identifying the similarities and differences between educating a strategic thinker, a strategic leader, or a senior leader for a specific working environment. It concludes with a studied critique of Australia's current practices, and makes a number of recommendations for making the profession of arms more relevant for the contemporary strategic environment.

This paper is 29 pages long.

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Introduction¹

The most important function of any government is to safeguard the security and economic prosperity of its people. Preparing and educating the politicians, senior government officials and military leaders who make, and implement, decisions on security matters for this responsibility is therefore of national significance. Yet politicians rarely deliberately undertake education to prepare them to exercise judgement on national security issues. This clearly places further, genuine, importance on the preparation of the senior civilian officials and military officers who advise and support them in safeguarding the security of the nation.

This paper compares senior professional military education in Canada, the United States (US), the United Kingdom (UK) and Australia. It explores a range of contested ideas as to what professional military education should seek to deliver and how this is best done. It argues that Australia's approach to the preparation of its military leaders is appropriate, high quality, valid and as effective as those of other nations. However, the generalist nature of the Australian approach to senior professional military education has compromises and vulnerabilities. In particular, there are gaps in the Australian approach that should be closed, particularly in the preparation of warfighting commanders and civilian Defence officials.

This paper invites senior educators, practitioners and participants in the national security environment to consider the points raised, and it invites a dialogue on these issues in order to achieve more effective professional military education outcomes, particularly among like-minded nations.

A Common Approach to Professional Military Education?

In September 2011, staff from Australia's senior professional military education institution, the Centre for Defence and Strategic Studies, 'benchmarked' its Defence and Strategic Studies Course (DSSC) with eight military college counterpart courses in Canada, the US and the UK.² These colleges included the National Security Programme (NSP) of the Canadian Forces College, the US National War College (NWC), US Industrial College of the Armed Forces (ICAF), the US Army, Navy and Marine War Colleges, the UK Defence Academy, UK Higher Command and Staff Course (HCSC) and the Royal College of Defence Studies (RCDS).

¹ This paper refers extensively to documents in the possession of the author gathered during the September 2011 CDSS Benchmarking Visit. For an earlier discussion on the topic of Joint Professional Military Education, see the special edition of the Australian Defence Force Journal, No. 181, 2010.

² The staff involved were the then Principal, Dr Alan Ryan, and the author in his capacity as the Director of Curriculum Development.

The benchmarking visit confirmed that there is no acknowledged ‘world’s best practice model’ in professional military education. Each college develops strategic leaders and thinkers for their nation’s defence and security organisations. Based on government direction, and because each nation’s requirement is different, every college has developed its own unique response, and all are articulate and confident about the suitability of their program in meeting their government’s needs.

Overall, these responses form a spectrum of delivery options which highlight different views on how to best implement professional military education. These different ideas should be rigorously debated as the conclusions drawn shape the learning effects that are sought, the considerable resources expended, and, ultimately, the capacity of those officials who are responsible to safeguard national security.

The key questions this paper explores are:

- a. What are professional military education institutes trying to achieve?
- b. Is professional military education more of an art or a science? Should the teaching focus be on intangible benefits or measurable outcomes?
- c. Is ‘active’ or ‘passive’ learning the better method to develop strategic leaders?
- d. Who gets to learn?
- e. Who designs and teaches the courses?
- f. How best to nurture andragogy, self-awareness, judgement and the confidence to decide?
- g. Improving capability through technology; what are the relative values of ‘push’ and ‘pull’ systems in professional military education?

There are of course other issues worthy of discussion, including governance and institutional effectiveness, which fall beyond the scope of this paper. For those interested, see in particular the United States Marine Corps University series of publications that concisely enunciate its strategic plan, governance, academic and administrative arrangements.³

What are Professional Military Institutes Trying to Achieve?

On the face of it, there is general agreement on the capability effect, or ‘requirement’, sought by senior professional military education courses. All colleges aim to develop selected personnel to be effective at the strategic level in

³ These documents include the ‘Marine Corps Professional Military Education Continuum’, March 2010; ‘Marine Corps University Strategic Plan 2011 – 2016’; ‘Marine Corps University Factbook 2010 – 2011’; and the Southern Association of Colleges and Schools, ‘The Principles of Accreditation’, 3rd Ed, Decatur, GA, 2008.

the joint, whole of government and multinational environments. However, beyond this, an analysis of the table of course aims below – see Table 1 – suggests that there are three overlapping intents; to develop a ‘strategic thinker’; to develop a ‘strategic leader’; or to develop a senior leader for a specific function or environment. These different intents impact significantly on the student demography, learning methods and course content of the colleges.

College	Attendees (who)	Focus (why)	Level (what)
Canadian National Security Programme	Selected military, public servants, international and private sector	Future strategic responsibilities	Complex and ambiguous global security environment
US National War College	Selected military, State department, other civilian agencies	Sharpen analytical skills for whole of government and national elements of power, especially diplomacy and military	National level
US Industrial College of the Armed Forces	Selected military and civilians including a unique blend of public officials and corporate managers	For strategic leaders and success in developing the national security strategy and evaluating, marshalling and managing resources in the execution of that strategy	National agencies and business
US Navy War College	Selected military and civilian agencies	Prepare strategically minded, critically thinking leaders, skilled in maritime and joint warfighting	Maritime and joint warfighting
US Army War College	Selected military and civilian agencies	To develop, inspire and serve strategic leaders for the effective application of national power ... emphasising the development and employment of land power	Joint, interagency, intergovernmental and international environment
US Marine War College	Selected military and civilian agencies	For decision making across the range of military operations in the joint, interagency and multinational environment	Joint, interagency and multinational environment
UK Defence Academy	Selected military, international and civilian agencies	Position the Academy as a Defence capability	National and Defence

UK Higher Command and Staff Course	Selected military, international and civilian agencies	Develop senior practitioners and commanders. Know the politics, use their intellect cleverly and have the emotional intelligence to connect and lead effectively	Strategic – high operational warfighting
Australian Defence and Strategic Studies Course	Selected military, international and civilian agencies identified for 2 and 3 star rank	Develop the skills to advise policy makers and apply military power and force capability to achieve national objectives	National and strategic

Table 1: Collated Course Aims⁴

The RCDS is noteworthy for its emphasis on producing strategic thinkers per se, with little consideration of it being a vehicle for promotions or being part of a process.⁵ At RCDS there is little focus on military practice other than its application as an element of national power. Similarly, force capability development is not significant in the course content. The course stays global in its considerations so that students maintain a ‘grand strategic’ focus.⁶

While some other colleges (notably the US National, Navy, and Army War colleges⁷) have quite a deep, academic component in strategy and strategic thinking, the focus of all the colleges other than RCDS is on producing strategic leaders. Strategic thinking and academic studies are subordinate in the curriculum to the development of strategic leaders. This explains their much broader curriculum which generally includes strategic context, statecraft and national security decision-making, the application of military power and the development of force capability to meet national objectives.

While these are all outcomes, it should not be overlooked that physical inputs such as scale and resources significantly impact on course focus and coverage. Canada and Australia, with only one senior residential course each, have a ‘generalist’ approach that seeks to address all the aspects of strategic leadership in one 11-month course. That breadth of coverage inevitably constrains the depth at which any topic is pursued. In contrast, in the US and UK where there

⁴ Table derived from materials in the possession of the author, many of which were gleaned during the benchmarking visit.

⁵ Charles Style, Commandant of the Royal College of Defence Studies, London, 22 September, 2011.

⁶ Simon Williams, Senior Directing Staff, Royal College of Defence Studies, London, 22 September 2011.

⁷ See Douglas E Waters USN (Retd), ‘Understanding Strategic Thinking and Developing Strategic Thinkers’, *Joint Force Quarterly*, Vol. 63, 4th Quarter, 2011, pp. 113-119, for an excellent discussion on the United States Army War College strategic thinking course.

are multiple professional military education colleges the course content of each is narrower but deeper. Collectively, however, they cover the same topics.

In accordance with the US Officer Professional Military Education Policy (OPMEP) all US colleges focus on common strategic and professional issues for roughly two-thirds of the course but have a distinct functional or environmental focus for the remainder of the course. This creates a second overlap; that of producing leaders for specialist functions. For example, the US National War College prepares senior leaders in the national security/policy space but is particularly focused on the diplomatic and military elements of national power.⁸ The Industrial College of the Armed Forces focus is on national security strategy but with a particular emphasis on the economic element and the business management aspects of Defence: ‘evaluating, marshalling and managing resources in the execution of that strategy’.⁹ The three US Service Colleges visited (Navy, Army and Marine War Colleges), all emphasise their service/military environment focus.¹⁰ This focus leads to more emphasis on military practise at the theatre strategic / combatant command level. A similar vertical stretching of focus to include the strategic – theatre interface exists in the generalist approach of Canada and Australia, and at the UK Higher Command and Staff Course. See Diagram.

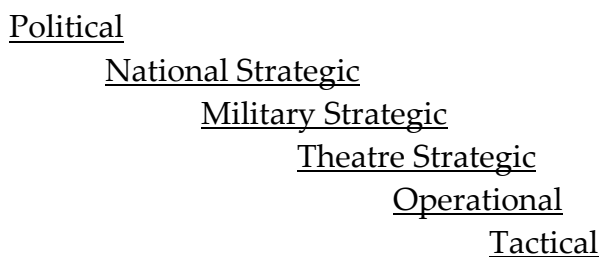


Diagram 1

⁸ John R. Ballard, Dean National War College, ‘National War College Curriculum Overview Brief’, Fort Lesley J. McNair, Washington D.C, 13 September 2011.

⁹ Harry Lee Dorsey, Dean Industrial College of the Armed Forces, ‘Industrial College of the Armed Forces Brief’ Fort Lesley J. McNair, Washington D.C, 13 September 2011.

¹⁰ Materials provided by Bill Spain, Associate Provost, US Navy War College, Newport Rhode Island, 16 September 2011. Spain quotes Admiral G. Roughead’s testimony to the US Congress House Appropriations Committee of 6 May 2009, where he states that the Naval War College is ‘the centre of maritime thought in the world and naval thought in the world’. Students are developed for strategic leadership but that leadership is also clearly intended to serve a ‘saltwater’ focus. The priorities of the US Navy War College are navy, maritime and national. Similar land-centric material was provided on the US Army War College Mission to ‘develop, inspire and serve strategic leaders for the wise and effective application of national power...emphasising the development and employment of land power’. Material provided by William Johnson, Dean US Army War College, Carlisle Barracks, Pennsylvania on 15 September 2011.

While the distinction between developing leaders for specialist functions, and developing strategic leaders, is a nuanced one, it needs to be acknowledged by the colleges and understood by their students. For example, each year a small number of students in their annual feedback survey for the Australian DSSC comment that the course is 'schizophrenic' in its emphasis on producing graduates who are meant to be both strategic leaders and senior warfighters. The DSSC content does try to do both because it is preparing students to lead across all of the Defence organisation, but some students question this coverage as it is not focussed purely on strategic leadership.¹¹

This discussion leads one to question what the professional military education requirement should be; leader, thinker or environmental specialist? Overall, contemporary practice suggests that professional military education is for the development of strategic leaders. Strategic thinking, academic studies, and mastery of specialist functions are very important but they only subordinate elements in the preparation of effective strategic leaders.¹²

Is Professional Military Education An Art Or A Science?

How an institution teaches its curriculum can be as important as what is taught¹³

Attempts to explain the various college teaching models generally start and end with a discussion of pedagogy - the art, science and profession of teaching.¹⁴ Broadly, debate focuses on how best to both enhance, and measure, capacity in a student. Are strategic leadership attributes best developed and measured scientifically via tangible proofs such as assessed written product and observed performance in exercises, activities and class? Or are strategic leadership attributes best developed and measured as an art; though providing the issues, the thinking and reflection time for the students and then making a judgement of the individual's capacity? This is an ongoing debate among students and

¹¹ Students complete a survey of their DSSC course at the end of each year. The survey is vetted independently and externally to the CDSS by the Strategic Evaluation and Review Section, Directorate of Joint Education and Training Services, Australian Defence College.

¹² For example, in an excellent recent article in *Orbis*, Joan Johnson-Freese (Joan Johnson-Freese, 'The Reform of Military Education: Twenty-Five Years Later', *Orbis*, Winter 2012, pp. 135-153) draws attention to the academic deficit in PME, where the Colleges are criticised because they are not producing strategic thinkers in a purely academic sense. However this overlooks the crucially important role that retired senior military, not to mention civilian, personnel have in coaching, mentoring and nurturing strategic leadership skills.

¹³ Quote attributed to the Skelton Report, cited in US House of Representatives Committee on Armed Services Subcommittee on Oversight and Investigations, 'Another Crossroads? Professional Military Education Two Decades After the Goldwater-Nichols Act and the Skelton Panel', Washington D.C., April 2010, p. 64.

¹⁴ US House of Representatives Committee on Armed Services Subcommittee on Oversight and Investigations, 'Another Crossroads? Professional Military Education Two Decades After the Goldwater-Nichols Act and the Skelton Panel', Washington D.C., April 2010, p. 64.

staffs. Again, the DSSC student annual surveys generally include some comment that the focus on written deliverables and ‘product’ in exercises and activities can curtail valuable student discussion and learning about an issue under consideration.

A pivotal issue is to identify who the principal customers of professional military education are. While the instinctive answer is ‘the students of course!’ that answer is incomplete. There are two main clients who need to be satisfied about the effectiveness of professional military education: the students being developed as strategic leaders and the security hierarchy on behalf of the taxpayers who are paying. This dual client reality dominates the approach of all the colleges to professional military education. The benchmarking discussions revealed that while college staffs exhibited a slight preference toward the importance of art, in delivery most colleges have opted strongly for tangible proofs and assessment as part of their curriculum. This is because each college is resourced and owned by its government, and, ultimately, the taxpayer. The colleges are heavily influenced by the need to have tangible ‘proofs’ that students demonstrate the skills necessary for a strategic leader. Exercises, essays, discussions and learning methods that can produce tangible evidence of these skills are the primary focus of most of the colleges visited. The US colleges in particular appear more prescriptive in their emphasis on assessment. This is at least partly due to close Congressional scrutiny of the professional military education course outcomes and reflects strong guidance that Congress wants tangible evidence of a student’s capacity to demonstrate fitness as a strategic leader.¹⁵

At the RCDS the discussion was somewhat different. There it was argued that it is more important for the students to have time to reflect and think, and that the course work load be kept as light as possible to allow for this reflection and still deliver quality work to meet post-graduate qualifications. RCDS management argues for intellectual space to allow the students’ leadership skills to develop. It also argues for trust in the institution to allow it to judge that its approach is effective. The purity of the RCDS argument is attractive, yet how it will be maintained in an ‘age of austerity’, where evidence of value for money is a high priority government requirement, is a moot point.¹⁶

While the debate over art or science is lively, professional military education courses are ultimately for practitioners and the requirement is to develop

¹⁵ See the US House of Representatives Committee on Armed Services Subcommittee on Oversight and Investigations, ‘Another Crossroads? PME Two Decades after the Goldwater-Nichols Act and the Skelton Panel’, April 2010, pp. 68–70.

¹⁶ The ‘value for money’ argument is of course a key concern for governments. Even though Australia has so far weathered the global financial crisis relatively unscathed, towards the end of 2011, the new Australian Secretary of Defence, Mr Duncan Lewis, announced that his priorities for Defence were ‘supporting our people on operations; providing the Government with the best Defence capability we can; *delivering value for money* for the Australian taxpayer; and professionalising our workforce.’, *Defence Magazine*, No.5, 2011, p. 4 [emphasis added].

strategic leaders who can ‘think then do’. This dual requirement explains the need for demonstrated capacity in both quality of thought and the ability to translate that thought into appropriate actions. Thus professional military education requires a hybrid pedagogy – part art and part science to satisfy the legitimate needs of both customers – the students and their government.

Is ‘Active’ Or ‘Passive’ Learning The Better Method To Develop Strategic Leaders?

The debate over teaching pedagogy resonates in the learning delivery approaches of each of the colleges. In broad terms, the UK, Canada, and Australia use a form of cooperation between Defence and an external academic provider, while the US colleges use an internal academic faculty that delivers an internally conferred degree. The former method is lean and cheaper in overhead and staff development costs, but is considered by some to provide a more passive learning environment. The US method is expensive in inputs with large staff and facility costs but the US colleges argue that it enables more ‘active’ learning outcomes.

The US approach involves in-house delivery by academics and military scholars who also facilitate what is considered to be more active learning through student-led seminars. The emphasis is on students preparing for syndicate discussion by reading 100 – 125 pages of set text per day and then participating in a discussion of up to four hours in syndicate facilitated by the faculty staff. The intent is to instil a discipline of lifelong learning through reading, consideration and debate. US college syndicate sizes range between 13 and 16 students, much larger than UK and Australian syndicate sizes.

The case for ‘active’ learning is detailed in the 2010 US Congress House of Representatives Investigation Report into professional military education.¹⁷ In summary, the report confirms a preference for active learning and acknowledges the progress of the US colleges in this regard. While no target ratio is identified in the report, nor in the Officer Professional Military Educational Policy (OPMEP), the report indicates that active learning percentages that include ‘student-centred seminar discussion, case study, simulation exercises and field research’ should be above 70 per cent of the curriculum. The report concludes that all the counterpart US colleges employ predominantly active instructional methods above that level.¹⁸

¹⁷ US House of Representatives Committee on Armed Services, Subcommittee on Oversight and Investigations, ‘Another Crossroads? Professional Military Education two decades after the Goldwater-Nichols Act and the Skelton Panel’, April 2010, pp. 64 – 71.

¹⁸ US House of Representatives Committee on Armed Services, Subcommittee on Oversight and Investigations, ‘Another Crossroads? Professional Military Education two decades after the Goldwater-Nichols Act and the Skelton Panel’, April 2010, pp. 64 - 65.

The alternate approach used at RCDS, UK HCSC and Australian DSSC is a mix of external subject matter expert lectures, supported by smaller readings and followed by syndicate discussion and activities to explore the issue at hand to achieve the stated learning objectives. In this approach more time is allocated for individual student reflection. Presenters are external subject matter experts from high quality non-military academic institutions and senior government, business and military practitioners. This approach promotes contemporary expertise and diverse perspectives, and most practitioners provide their support *pro bono*. That said, this heavier use of central presentations is seen by the US as a more passive learning method. The academic partnership model is also open to concerns such as those raised recently by Avi Kober in regard to the Israeli professional military education experience. He argues that reliance on external academic providers can lead to a primacy of academic studies that diverts focus from the military capability rationale for professional military education.¹⁹

Having observed both methods, it is fair to say that there is more overlap of active and passive learning in the execution of the different approaches than is initially apparent. For example, in US syndicates, the facilitator will often commence with 20 - 25 minutes of opening remarks that is essentially a mini-lecture spelling out the key issues. In contrast, half of every DSSC or RCDS presentation is devoted to student-led questioning of the material and exploration of the set learning objectives. Using the US active learning definitions, the Australian DSSC achieves a 75 per cent active learning standard based on student-led syndicate discussions and reviews, exercises, visits, and the student-led question and answer sessions associated with each presentation. The DSSC approach has more knowledge generation through central presentations supported by about 60 pages of reading per day and more time devoted to student research and reflection. This is also suited to the student demographic; an average of some 40 per cent of the students on the DSSC are from countries that do not have English as a first language.

One distinct difference among the colleges is in regard to the importance placed on student reflection. In Australia, the UK and Canada, college staffs place more importance on allocating specific time for the individual student to reflect on the learning achieved through curriculum activities. None of these colleges has a measure to prove the effectiveness of reflection time. However, the utility of having 'thinking time' is consistently emphasised by professional educators and senior presenters throughout the course. Johnson-Freese also notes this, stating that unlike training which is more mechanical, '[e]ducation...requires thinking and reflection, which takes time.'²⁰ For strategic leaders, the personal

¹⁹ Avi Kober, 'What Happened to Israeli Military Thought?' *Journal of Strategic Studies*, Vol. 34, No. 5, October 2011, p. 727.

²⁰ Joan Johnson-Freese, 'The Reform of Military Education: Twenty-Five Years Later', *Orbis*, Winter 2012, p. 138.

conclusions that students determine through reflection on professional issues are some of the most important takeaways from a professional military education course. Moreover, consistent student feedback on the DSSC over several years stresses that such time is critical and beneficial to them in their consolidation of the lessons learned from the curriculum. The heavier reading load and syndicate contact time of the US method appears to preclude this approach to student reflection.

In discussions, each of the college staffs exhibited a preference for active learning through syndicate seminars that maximise student involvement. In terms of teaching pedagogy and learning theory, active learning is clearly the preferred method. However, without considering resource constraints this purist argument is inadequate. For each of the colleges, context and institutional inputs such as scale, resources, historical legacy, the availability of external educational providers and subject matter experts, and college location are key determinants in the teaching method that has been adopted. Ultimately, the teaching approach of the colleges is decided by what each government is prepared to resource.

For both the RCDS and the UK HCSC, the availability of high quality academic providers close by has meant that an academic partnership in the provision of professional military education is their most cost effective option. Similarly, the CDSS does not currently have the scale or resources to have a large in-house faculty to support a reading-based, internal faculty-delivered course. Instead, the availability of quality educational partners, its location in the nation's capital (Canberra) and technologies such as videoconferencing make external subject matter expert presenters a viable, inexpensive alternative. The Canadian NSP is a successful hybrid of both academic support and in-house delivery. The NSP has ten academics on site who are also public servants. This approach enables an effective balance between academic educational input and a professional military curriculum focussed on generating military capability. In the US, historical legacy has provided colleges with the resources and in-house expertise to have their own faculty. Moreover, the locations of the various Service colleges (Montgomery, Newport, Carlisle and Quantico) distant from the national capital (Washington D.C.) mitigate heavily against the use of external subject matter expert presenters or reliance on a local academic provider.

As important as the debate on active and passive learning is, it appears that the approach chosen will largely be directed by the government's willingness to fund the institutions. However, for some colleges the technology of the Information Age may provide opportunities to overcome these constraints.

Who Gets to Learn?

Who gets to learn is becoming a key issue for all the colleges. Traditionally, the student demography was decided by the host nation and the other governments that select and pay for their students to attend. However, two key influences: the broadening of the concept of security and the opportunities provided by technology may soon open professional military education to a wider audience. This offers benefits to government by generating a better and broader security capability effect.

The broadening of the concept of security has brought a range of new issues and new customers for professional military education courses. Consistent among all colleges is the desire to add more inter-agency and international students to their program. Professional mastery at the strategic level is not now conceived in narrow military terms. Instead, the emphasis is on military mastery but within a broader security context that is joint, interagency or international.²¹ The curriculum focus for these senior courses is not looking down and inside the organisation but rather looking up and outward to connect with other elements of government and international security and military efforts. This not only influences what needs to be studied, but also who needs to be educated. Defence colleges were once a closed preserve with a specific focus: preparing national military officers in strategic leadership. Now, defence colleges are increasingly seen as part of a transparent military diplomacy, where leaders from other nations, and other government agencies, are encouraged to attend in order to enhance better common understandings and lay the foundations for future cooperation.

While all colleges are moving in this direction, the rate of change varies. As mentioned above, the Australian DSSC has about a 50/50 mix of Australian and overseas students at the Colonel equivalent/06 level. This reflects a focus on building a global cohort of future defence and security leaders with a particular focus on those from the Asia-Pacific. The RCDS 25 /75 per cent mix of UK and overseas students reflects the RCDS' focus more on international strategic issues and less on UK defence issues. This student mix is consistent with the UK's strong tradition of military diplomacy. In contrast, the remit of the UK HCSC to 'equip its core military students to be future operational leaders',²² explains its near total UK student composition consistent with its classified, military planning focus. Yet, even there, the nature of the curriculum has broadened significantly in the last five years to provide a broader 'top-down

²¹ Refer to Table 1.

²² Material provided by Paul Lyall, 'Director HCSC, Director HCSC Intent Statement', 21 September 2011.

understanding of the strategic context and the ability to exert leverage with potential partners in the national and international security communities'.²³

The Canadian NSP aspires to a 1/3 Canadian military, 1/3 other Canadian agencies or corporate business and 1/3 international student demography.²⁴ As with all colleges, the NSP struggles to achieve the interagency student numbers. This reflects a common challenge for the various colleges that while defence forces are prepared to invest in long residential courses for a few chosen future leaders, this is not the staff development culture of most government agencies. Generally smaller in scale, and therefore resources, and more pressed with domestic functions, other agencies are often only willing to release small numbers of personnel for short courses. This cultural difference requires innovations such as the modularisation of longer courses and government leadership by directing agencies to participate. In 2010, the Australian Government established a National Security College at the Australian National University principally to provide Executive Development short courses for interagency students. This innovation aligns well with the year long residential DSSC course.

In accordance with the US Congress Goldwater-Nichols Act and other guidance, the US colleges have a legislated student mix of 60 per cent primary Service and 40 per cent 'other', mainly at the 05 and 06 rank level.²⁵ Given the size and scale of the US, and its world-wide responsibilities, the colleges' foci are primarily on developing America's own leaders. Consequently, the proportion of international students across the US colleges is smaller and varies between 9 to 19 per cent.²⁶ The smaller numbers of overseas students reduce the language challenge which in turn also aids student-led seminar-based learning. With slightly more junior students, the focus of the US Service colleges appears to be more toward graduate employment in combatant command headquarters, while the US NWC and ICAF focus is on graduates who will work in national strategic headquarters.

The other evolving challenge is whether the focus of senior professional military education should be limited to a chosen few. At a recent international conference the new Commander of the Australian Defence College, Major General Craig Orme, challenged what he described as 'our industrial age model of learning with...school houses full of instructors who teach and students who

²³ Material provided by Paul Lyall, Director HCSC, 'Director HCSC Intent Statement', 21 September 2011.

²⁴ Material provided by Gary Hatton, Deputy Commandant, Canadian Forces College, Toronto, 12 September 2011.

²⁵ US House of Representatives Committee on Armed Services Subcommittee on Oversight and Investigations, 'Another Crossroads? Professional Military Education Two Decades After the Goldwater-Nichols Act and the Skelton Panel', Washington D.C., April 2010, p. 11.

²⁶ The percentage of overseas students on the 2011 US college courses are: NWC 15 per cent; ICAF 9 per cent; USMWC 8 per cent; USAWC 17 per cent; US Navy WC 19 per cent. Materials in the possession of the author.

learn'.²⁷ He questioned the applicability of this system of privilege where he noted that the 'learner has first to be privileged through the process of selection and enrolment, receive the learning we decide they need ... [and] then leaves the school house qualified'.²⁸ He argued that in the Information Age, adaptive military education institutions can exploit better technology to improve knowledge generation and distribution to a wider audience.

His view is shared by others. The US National Defense University is actively experimenting with 'taking education to practical warfighters'.²⁹ Initiatives include the trialling of 'blended' residential courses where the student mix combines experienced officers of standard seniority and selected officers who are being 'fast-tracked'. The US National Defense University is also partnering with suitable military sponsors to deliver distributed residential education forward in locations where both a critical mass of students and the need has been established. The US Service colleges and UK Defence Academy have run large scale, non-residential, distance learning courses generated from their colleges for some time. The non-resident curricula and materials derive from, and closely parallel, that of the respective resident courses.³⁰

There is a need to broaden access for all those who need to learn. There is a clear government requirement for the preparation of a select group of future strategic leaders in the security space. But this group should now reflect the new security reality and be joint, interagency and international in nature. While the benefit of preparing these leaders through long residential courses is clear and needs to be maintained, the opportunity to provide education to other potential senior leaders should also be seized. These officers will also hold positions of high responsibility within Defence and other security agencies and they also need access to the course content. It is within the remit of the colleges to use technology to deliver their material to this wider audience.

Who Designs and Teaches the Courses?

For most colleges, college staff design a curriculum that is taught by a mixture of suitably qualified academic and military scholars. However, the broadening range of professional and practitioner curriculum content and the opportunities provided by technology are stretching this traditional approach. Also, Defence

²⁷ Craig Orme, 'Military Education in the Information Age: An Australian View', paper delivered to the Forum of Presidents of the Sino-Foreign Military Institutes, Nanjing, China, 25 October 2011, pp.11-12.

²⁸ Craig Orme, 'Military Education in the Information Age: An Australian View', paper delivered to the Forum of Presidents of the Sino-Foreign Military Institutes, Nanjing, China, 25 October 2011, pp.11-12.

²⁹ Material provided by John W. Jaeger, Vice-President of the National Defense University, Fort Lesley J. McNair, 13 September 2011.

³⁰ Material provided by Bill Spain, Associate Provost, US Navy WC, 16 September 2011. Student enrolments for the Naval / Joint non-resident programs for 2011 are 4,070.

strategic leadership courses incorporate vocational teaching, coaching, mentoring and development support not required in an equivalent academic strategic studies program. As a consequence the design and delivery of a curriculum in a Defence college requires specialist military education expertise sufficiently broad to cover all aspects of the military capability effect required by both government and the students. The colleges provide a range of approaches in this regard and again the key determinant is not so much based on pedagogy, but resources.

The most highly resourced colleges are in the US, some with a faculty of over 400 staff, and staff to student ratios in the order of 1:3 to 3.5.³¹ At that scale and level of resourcing an internal capacity adequate to cover the breadth of the curriculum is achieved. Staff design and deliver the curriculum with external academic accreditation of the programs. Most faculty staff have extensive military experience and / or requisite academic qualifications suitable to teach a post-graduate course. Most US colleges (particularly the US Army College) have a developed system of formal training of faculty for their role as facilitators of the student-led seminars. The professional credentials of the US faculties reduces reliance on externally derived coaches and mentors to provide practical strategic level coaching and leadership insights to the students.

Countries with fewer students and with considerably less resources have found a range of solutions to cover curriculum design and delivery, and student coaching and mentoring. The Canadian response is a very effective balance of Defence control of design and appropriate academic coverage of the curriculum. Military staff who have an appropriate understanding of the capability requirement develop the curriculum. A specialist professional military education faculty of 10 resident academic staff with a mix of academic and military experience and qualifications design and deliver their respective courses. These academic staff are also defence department public servants imbued with that ethos. Facilitation, coaching and mentoring is provided via a contracted group of former two star (Major General equivalent) or higher senior military, diplomatic and interagency officials. These contractors have the practical insight and gravitas to perform this important strategic leader development function.³²

The UK RCDS and HCSC have leveraged off world class civilian educational institutions and appropriate external presenters to address their curriculum needs. Their curriculum is broadly designed to UK Ministry of Defence requirements in partnership with Kings College London. Course delivery is

³¹ Ratio material provided by Harry Dorsey, Dean ICAF, 'Industrial College of the Armed Forces brief' Fort Lesley J. McNair, Washington D.C, 13 September 2011 and drawn from the US Navy WC, President's Report, Spring 2010, Newport, Rhode Island, p. 52 provided by Bill Spain, Associate Provost, US Navy War College on 16 September 2011.

³² Material provided by Gary Hatton, Deputy Commandant, Canadian Forces College, Toronto, 12 September 2011.

largely through the academic provider overseen by a small Defence and military staff. Whilst the provision of academic services is by contract, the long established relationship has led to a mature understanding on both sides of the capability requirement and the strengths and limitations of the relationship.³³ Particularly for the HCSC, sourcing of specific Defence-related practitioners by the military staff where appropriate reduces the cost of the programs and provides a level of contemporary senior practitioner insight not readily available in academia. At RCDS facilitation, coaching and mentoring is provided by a very small number of two star equivalent, serving, senior military or Defence officers, supplemented by Kings College academics for subjects where that is appropriate.³⁴

Least resourced of all the colleges, the Australian DSSC has adopted the most distinctive and leanest model. There is no academic faculty although there are several staff with senior academic qualifications. A small instructional staff of 11 for 45 students has both a command and planning function and a facilitator and delivery capacity. The staff/student ratio is 1:4. The curriculum is designed and coordinated internally in accordance with guidance from the senior Defence committee. Subject matter experts are contracted on a fee for service basis. The DSSC is supported by a pool of some 300 subject matter experts a year, including around 100 academics, 125 senior government and Defence practitioners, and 75 senior business executives. Presenters from government and many from the corporate sector provide their services free of charge. This 'virtual' faculty is sourced globally to achieve a world class level of subject matter experts. Technology, particularly videoconferencing, is used for many such presentations.

This approach overcomes reliance on the limited pool of expertise in strategic leadership studies available from any one Australian civilian university, and overcomes the insufficient resources to fund an in-house faculty of sufficient size to cover the breadth of the curriculum. This approach is flexible, adaptive and responsive to higher guidance. The Master of Arts (Strategic Studies) course is supervised and accredited by a civilian university with an academic adviser resident at CDSS to monitor the academic standards of the program. Syndicate facilitation is provided by six O6 staff supplemented by 2, 3 and 4 star military and civilian officers who mentor all principal exercises and activities. The coaching and mentoring of these senior practitioners is reported to be of great value by the students.

Overall, contemporary practice suggests that most colleges prefer to own and control the curriculum design and to have a specialist internal faculty for curriculum delivery. However, this is also the most expensive model. Where

³³ Material provided by Christina Goulter, Defence Studies Department, King's College London, 21 September 2011.

³⁴ Material provided by Simon Williams, Senior Directing Staff, RCDS, London, 22 September 2011.

resources do not allow the internal faculty model, an academic-defence partnership with defence staff designing the curriculum, and academic staff delivering the program, is the next preferred option. However, this preference is dependent on the capacity of one academic institution to cover all aspects of the curriculum. Where that capacity does not exist, defence staff planning the curriculum in accordance with higher guidance and contracting subject matter experts on a fee for service basis is a lean and effective alternative. This approach comes with a higher degree of risk than other methods. It presumes access to academic and government presenters without paying the overheads associated with a permanent faculty staff. For countries with limited resources, and access to numerous quality educational institutions, this approach is viable and effective. Further, the flexibility this 'virtual' faculty approach provides allows the CDSS to change DSSC presenters and content; with an in-house faculty the CDSS would be limited to content reflecting the expertise of the academic staff.

How Best To Nurture Andragogy, Self-Awareness, Judgement and Confident Decision-Making?

In general, there is widespread agreement that the colleges provide a curriculum based around the enhancement of the following student skills and capacities:

1. Capabilities in strategic critical thinking;
2. Capabilities in excelling in positions of strategic leadership;
3. Skills in formulating and executing strategy and policy; and
4. Skills in joint warfighting, theatre strategy and campaign planning.³⁵

Knowledge of Defence process is only important to the extent that it provides context for the application of strategic leadership skills. The key skills to be developed in the students are personal – critical and creative thinking to resolve complex, strategic problems and relationship skills to achieve effective solutions to complex, strategic problems. However, the applied demonstration of these skills is conducted in a team environment so the capacity to lead, organise and influence runs through every course curriculum.

Most colleges encourage the consideration of complex problems in vague, uncertain, chaotic and ambiguous situations that allow students to exercise their critical and creative thinking capacity and to exercise judgement to progress issues. For selection on senior residential courses professional

³⁵ Articulated in the 2011 CDSS Mission Statement, and in US Chairman of the Joint Chiefs of Staff Instruction, CJCSI 1800.OID dated 15 July 2009. Appendix A to Enclosure A and Appendix D to Enclosure E.

mastery, technical expertise and intellectual ability are presumed prerequisites. What appears to distinguish the exceptional student and future strategic leader is their ability to align these strengths with a mastery of emotional and social intelligence.³⁶

Active learning opportunities such as seminars, exercises and visits are used to enable students to discuss, debate and demonstrate these capacities in a collegiate environment. In particular, these approaches maximise opportunities for self-learning and learning from peers in an adult learning environment. One of the Australian DSSC experiences consistently rated highly by students is the opportunity to 'learn from each other'. This approach appears to be commonly accepted in the colleges visited, but it does contrast somewhat with the practice of rote and passive learning teaching.

Even so, senior professional military education is distinguished by the desire to focus beyond academic studies and to focus also on the development of student capacities in self-awareness, judgement and the confidence to make decisions about complex and wicked problems. Some colleges, such as the US Army War College and more recently, the DSSC, provide specific programs to nurture self-awareness, judgement and the confidence to decide. The focus is on 'developing resilient leaders who understand relationships and communication and who can manage themselves and others with wisdom, creativity and values'.³⁷ The DSSC strategic leader's program seeks to go 'beyond the self awareness and self mastery competencies and incorporates applied empathy and skilled interpersonal interaction necessary for transformational and outstanding military leadership'.³⁸

There is widespread agreement among the colleges that strategic leadership skills are best developed through a curriculum that enhances: skill in formulating and executing strategy and policy, strategic critical thinking, excellence in strategic leadership, and skill in strategy and campaign planning. This learning is nurtured through creating a tolerant professional military education environment that encourages:

- personal critical and creative thinking skills;
- an awareness of the higher and broader security environment;
- relationship skills and the building of a cohort of future strategic leaders through learning from each other;
- the development of, and reflection on, personal strategic leadership philosophies and characteristics;

³⁶ Material provided by Rebecca Wade-Ferrell, Organisational Psychologist, Centre for Defence Leadership and Ethics, Australian Defence College. At CDSS, Emotional and Social intelligence are defined as 'the ability to recognise your own feelings and the feelings of others, to motivate yourself and others, and to manage your emotions and the emotions of others skillfully'.

³⁷ Material provided by Paul Lyall, Director HCSC, Director HCSC Intent.

³⁸ Material provided by Rebecca Wade-Ferrell, Centre for Defence Leadership and Ethics, Australian Defence College.

- a willingness to experiment with complex issues;
- a tolerance of diversity; and
- a tolerance of trying and failing as long as that failure leads to greater personal awareness and enhanced strategic leadership skills.

Improving Capability Through Technology

Technology can be used to make these excellent learning programs available to the far larger numbers of senior officers that also need them. A great deal of educational technology already exists. Learning Management Systems (LMS) such as Blackboard or Moodle that can make the curriculum content available online are already widely employed in the civilian education sector and internally in most of the US professional military education institutions. Providing course material access on-line enables the self starter learner to 'pull down' those aspects of course material that they deem appropriate to their development. Individual, proactive learning, is thus encouraged and empowered. The proliferation of electronic devices and the proficiency of younger generations (who are 'digital natives' rather than 'digital immigrants') to access 'pull' systems on line will only increase in the future and this needs to be anticipated and accommodated by the professional military education institutions.

The broad and inclusive nature of 'pull' systems is accepted but college concerns over control, legal and copyright issues and 'duty of care' must also be addressed. Technology can make course materials more widely available but currently there is no capacity for the institutions to measure the effect that their materials are having. Materials could be misunderstood, misapplied or deliberately used for purposes that they were not intended for. As the colleges have responsibility and accountability for the materials they provide, this is a reasonable, but not insurmountable, concern.

While the residential approach may be too exclusive for the Information Age, an open 'pull down' system is too unstructured and open to weaknesses and misuse. What is needed is to evolve the current residential 'push' system and to add a registered and monitored on-line 'pull' stream. In this controlled 'pull' stream, students who have been vetted and registered could access certain course materials for educational purposes. Access to these materials could be caveated to address legality, copyright and intellectual property issues. There are additional costs and risks, but the potential outcome of skilling the wider workforce make it worth the risk and the effort.

Taking the key points from the above discussions, a number of observations can be made. First, professional military education courses are primarily designed to develop strategic leaders. Second, they require a hybrid teaching pedagogy that is part art and part science to meet the needs of two customers – the students and the government. Third, while active teaching is the preferred

pedagogy, it is government resourcing that dictates the teaching model of who gets to learn, who gets to design the curriculum and who gets to teach. Finally, in the Information Age technology may provide the opportunity to outmanoeuvre resource constraints and expand the student audience.

How Does the Australian Approach to Senior Professional Military Education Compare Internationally?

The benchmarking visit was an excellent opportunity to compare the DSSC with counterpart courses in Canada, the US and UK. Overall, the visit confirmed that there is no single 'world best practice' and that the DSSC approach, student demography and curriculum are appropriate to the Australian context and current guidance. In total, the DSSC addresses the coverage of the counterpart courses visited, and is more focused on preparing its graduates to work immediately at the strategic level across the breadth of a Defence or security organisation. While initiatives such as the US Army War College Leadership, Health and Fitness program are worth emulating, no major curriculum gaps were noted. The opportunities for greatest improvement of the DSSC in the mid-term are in staff development, raising the standard of technology support for the course, and better articulation of DSSC course and governance arrangements for external audiences.

What the Australian DSSC Does Well

The areas in which the DSSC rate very highly include: student networking and relationship building at both the joint (navy, army, air force and public service) and international level; a consistent exposure to critical thinking to solve complex problems; understanding the broader political and institutional context for decision making at the strategic level; joint planning particularly in regard to military strategic planning for operations; and investment in self-awareness and personal leadership styles.

Institutionally, the DSSC is also the leanest of all the professional military education models and therefore rates well in efficiency, careful use of resources and value for money. The delivery arrangements make the course highly agile, and adaptable to new opportunities. Governance arrangements also make the DSSC very responsive to higher guidance and student and academic feedback. The DSSC has a very clear focus on achieving a military capability effect through professional military education.

Areas for Improvement

There are however a number of areas which the DSSC could improve in.

First, in comparison with the other colleges, the DSSC is weak in its Australian multi-agency representation and this deficiency needs to be redressed. Marketing, persuasion and innovative partnering for curriculum activities with the ANU's National Security College will help, but top-down direction to all security agencies to invest in and prepare their potential strategic leaders in the interagency security space is also needed.

Second, while creative thinking is practised through all the practical activities and the month of exercises in the course, more emphasis could be placed on enhancing this often overlooked aspect of leadership. Almost by definition, complex problems at the strategic level are not fixed by the application of status quo process. It requires some 'out of the box' thinking, often based around compromise, excellent communication, and an ability to re-frame a problem to mutual advantage. Like each of the courses, the DSSC needs to continue to insert creative thinking opportunities into its curriculum.

Third, despite the use of external subject matter experts to deliver the course, staff qualifications and staff development appear underdone in comparison with most of the other colleges. Formal preparation of staff in facilitation skills will be introduced in 2012 to address this. Another approach is to build a resident faculty of military scholars and on-site academics to support the DSSC and other Australian Defence College learning centres. Highly regarded Australian scholar Dr Michael Evans is currently used in this capacity to great effect. There is an issue of short term feasibility, however a pool of military scholars with relevant practitioner experience and PhDs could well be developed over the next ten years or so.

Fourth, the approach of reading-based, student-led syndicates is attractive and the DSSC should continue to increase its percentage of active learning opportunities above 75 per cent of the course. However, the DSSC is not resourced to fully adopt the syndicate approach. The breadth of the current curriculum, and the large international element of the student body, does not support a reading-based course requiring overseas members, many with English as a second language, to read, absorb and debate over 100 pages of course material a day.

Fifth, and significantly, most US colleges and Australian universities and schools already use Learning Management Systems (LMS) to deliver course materials on and off campus. The Australian Defence College, including the DSSC will shortly adopt a LMS system. The related use of tablets (such as iPads and similar electronic devices) also needs to be explored. Through the selection of an appropriate LMS, and appropriate training and resources, the Australian Defence College would be well situated to lead the Department of Defence into a structured, modern, accessible learning environment.

Sixth, the US Officer Professional Military Education Process (OPMEP) is used to provide contemporary and comprehensive higher guidance to the US colleges. This broad curriculum guidance is developed by the colleges and the Chairman Joint Chiefs of Staff. While such a formal system is not necessary to coordinate delivery for the DSSC alone, it may be useful to consider the value of an OPMEP in regard to guidance to Commander ADC for the entire professional military education continuum. Most colleges describe professional military education in five levels of development. This sequence is clearly articulated by the Canadian and US colleges. The DSSC and its counterpart colleges are at level 4 on the continuum. It may be useful for the Australian professional military education continuum to also be described in five levels aligned with the North American example.

Finally, governance arrangements at CDSS could be better explained and marketed. Those US colleges with in-house delivery and degree conferral have well established, articulated and staffed governance arrangements. By comparison, the DSSC could better articulate its purpose, function and governance arrangements for outside audiences. Inter-college contact on these issues would be helpful.

Areas that Require Greater Attention

There are several other issues that require attention. These elements do not relate to the DSSC, but to three gaps in the Australian professional military education continuum. The first is the failure to invest in Defence public servants as a military capability; the second is a gap regarding the preparation of warfighting commanders at the operational level and the third is a missed opportunity to continue the systematic leadership development of senior officers after they complete DSSC.

The Development and Employment of Public Servants

Unlike the military students, there is no alignment between professional education and the future employment of the public service graduates of the DSSC. With the exception of the current Secretary of Defence, the commitment of many senior public servants to investing in, and preparing, their subordinates for strategic leadership through a professional education is unclear. Some appear to believe that 'on the job training' is sufficient and investment in professional education is unnecessary. Also, managers do not 'own' their workers in the same way that the Defence Force does; civilian defence personnel could well be educated and then leave the department, making managers reluctant to spend the resources required. The 'master-apprentice' approach is strong in many agencies, but it is not appropriate to the Department of Defence. There is a reason to this approach for line agencies where each day they are doing their full job. However this reasoning does not transfer to security and Defence responsibilities where much activity is invested

in planning and preparation to enable smooth execution when and if required. The failure to invest in the education of senior public servants as a warfighting capability, and to plan their career paths accordingly, is striking in comparison to the attitude of the Services and the way in which they employ their DSSC graduates.

An Operational Warfighting Command Course

There is currently no course in the professional military education continuum that specifically prepares likely officers for warfighting command at the operational level. This is a critical military capability vulnerability and a large reputational risk. To address this gap, selected 05/06 officers in or, preferably, identified to assume command of our principal combat units or key planning appointments at operational headquarters should attend the course. It is these leaders who are the most likely to be chosen to command any task force or battle group on operations in the short to mid-term. Recent experience is that Australian commanders exercise warfighting command roles on operations mainly at the 05 level or 06 level and generally before attendance at the DSSC. Those deployed on operations after DSSC generally exercise national command in theatre or are in senior staff appointments on coalition or United Nations operational or strategic headquarters.

The aim of an Operational Warfighting Command Course would be to hone joint and interagency warfighting planning and command skills within a strategic context. The course would be classified and students would be primarily ADF, with Defence public servant and interagency representatives from organisations likely to deploy on operations with the ADF, and some officers from allied nations. Course content would focus on campaign planning and wargaming the operational command of joint forces within a strategic context (similar to the previous focus of the UK Higher Command and Staff Course). The outcome would be to develop warfighting commanders who have a 'top-down' understanding of the strategic context and the ability to leverage with potential partners in the national and international security communities. The participants 'will need to master the science and tools of campaign warfare and to wield them with wisdom and artistry'.³⁹ The likely duration of such a course would be three months with a heavy emphasis on campaign planning procedures, wargaming of joint assets in an international setting and analysis of historical case studies. It would probably need to be conducted annually for a panel of eight to 15 officers.

³⁹ Material provided by Paul Lyall, Director HCSC, 'Director HCSC Intent', Shrivenham, United Kingdom, 21 September, 2012.

Post-DSSC Senior Leader Development

In regard to post-DSSC senior leader development, top-down involvement and guidance is required. While some larger nations continue with shorter 07, 08 and 09 level residential courses, for Australia this is largely unnecessary as officers are integrated into the strategic level from 06 rank and the small numbers of senior officers do not warrant large or long courses. Structured coaching and mentoring programs that further develop the emotional and social capacities of senior officers to be effective in highly political, interagency and international strategic settings are likely to be more productive and cost-effective and valued by the participants.

Working from the baseline established by the DSSC personal leadership development program, senior officers could be coached and in some instances mentored as they progress in rank or are posted to appointments that require new skill sets, awareness and social or emotional techniques. The DSSC leadership program identifies the individual's personal leadership style, develops an individual leadership development plan, and in some cases introduces an executive coach to assist the student implement the plan. From this base, structured continuation of coaching and mentoring managed by the individual in conjunction with the personnel agencies should not be difficult. A critical enabling element will be better alignment and communication between personnel agencies and CDSS in regard to the development of individual officers.

Conclusion

Overall, the 2011 benchmarking visit confirmed that the Australian DSSC approach to senior professional military education is appropriate for Australia's current circumstances. Designing an Australian solution focused on the Chiefs of Service Committee-directed mission is entirely consistent with the approach of other professional military colleges. The coverage of the curriculum is similar to the other colleges with a shared emphasis on strategy, strategic context, leadership, critical and creative thinking frameworks, multi-agency and international cooperation. No significant gaps were noted in either the DSSC curriculum or the desired student demography. However, in practice the DSSC does not have sufficient interagency representation. Opportunities for improvement of the DSSC were noted in staff development, the use of technology both to support the students and to make material available to other senior officials, and in the promotion of the DSSC programme and its governance measures to external audiences.

More broadly, what became apparent from the visit is that the Australian professional military education continuum has gaps below and above the DSSC that need to be addressed. Between the Australian Command and Staff Course for 05s, and the DSSC, there is a need for a 'just in time' Joint Warfighting Commanders Course targeted at selected officers in the 05–06 level. After the DSSC, there is a need for structured and funded coaching and mentoring programs to continue the professional development of selected officers. Throughout the continuum there is also a need to educate public servants to achieve an improved Defence capability effect.

Joint Professional Military Education has a crucial role to play in developing the intellect and skills of our senior military leaders so that they can operate to their full potential. With new senior leaders in the Department of Defence, it is timely to reconsider how we can make the education opportunities for the profession of arms more relevant for the contemporary global environment.



