

August 2012 — Issue 48



Educating for the profession of arms in Australia

by Hugh Smith and Anthony Bergin

Executive summary

This *Special Report* examines professional military education (PME) in Australia—the career-long process of developing the qualities Australian Defence Force (ADF) personnel require as members of the profession of arms. First, it sets out reasons why PME is crucial to Australian security and outlines some recent criticisms of the system. Second, it examines the organisational, personnel and pedagogic challenges that all PME systems must deal with. Third, it analyses the principal institutions that provide PME in Australia, taking note of their strengths and weaknesses.

The final section of the report sets out a series of recommendations, which are summarised below.

1. A coherent and unified PME system

- The ADF should develop a clear definition of PME and set out the objectives that PME is intended to achieve.
- Clear minimum standards should be set for the different levels of Joint PME.

- Efforts should be made to fill the approximately 10-year gaps between the Australian Defence Force Academy (ADFA) and the Australian Command and Staff College (ACSC), and between ACSC and the Centre for Defence and Strategic Studies (CDSS).
- The eventual co-location of all Australian Defence College (ADC) centres of learning is supported as contributing to the creation of a critical mass of teaching staff and a more diverse student body, as well as to economies of scale and more integrated delivery of courses.

2. A flexible system: students and methods

- Further efforts should be made to reach out to members of the ADF Reserve who bring civilian skills and attributes into the ADF.
- An increase in the number of reservists taking full-time ACSC and CDSS courses should be sought, given the growing reliance on reserve forces by all three services.

- The delivery of courses and modules by distance methods is supported.

3. A relevant system: operational art

- The ADF should introduce an Operational Warfighting Command Course comparable to the UK's Higher Command and Staff Course. An annual course lasting around three months might cater for 8–15 ADF officers and a small number of Defence public servants and representatives from relevant agencies. Such a course might be developed in cooperation with Canada and New Zealand and conducted on a rotating basis.
- The ADF should examine the need for a centre of studies on joint warfare. There would be value in locating it at ADC and in linking it to a resident faculty at ADC (see Recommendation 6).

4. A relevant system: behavioural science

- UNSW@ADFA (the University of New South Wales at ADFA) should introduce a compulsory one-semester behavioural science course (6 units of credit) as a general education course.
- UNSW@ADFA should introduce a three-year program in behavioural science as an optional specialisation.
- In teaching behavioural science, UNSW@ADFA should make use of service personnel qualified in psychology and qualified civilians in Defence.

- ACSC and CDSS should introduce lectures and/or electives relating to behavioural science in general and military sociology in particular.
- ADC should include a behavioural scientist in its resident faculty.

5. A few good academics (in uniform)

- The ADF should adopt a policy of increasing the number of personnel with higher postgraduate qualifications.
- The ADF should examine ways and means of securing for selected officers a one- or two-year master's degree at a civilian university with a significant component of research.
- The ADF should adopt a policy whereby those with such qualifications can expect to be employed in teaching at ADFA, ACSC or CDSS.

6. An in-house faculty at ADC

- ADC should expand its current faculty to three or four scholars.

7. Outsourcing expertise: relations with Australian universities

- ADC should begin to analyse future contracting issues with a view to developing an appropriate strategy.
- ADC should examine whether there are ways of encouraging more universities to enter the market in order to encourage greater competition in tendering.

- ADC should examine ways of maintaining contact with universities in general, including developing some form of relationship with their peak body, Universities Australia.

8. Promoting the study of defence-related subjects in Australian universities

- The ADF should examine the feasibility of a program to expand the study of military-related behavioural science at Australian universities.

9. Beyond the course

- ADC should develop a consistent methodology for evaluating all of the courses for which it is responsible.
- Each service should compare the retention and promotion rates of officers who have entered via ADFA against officers who have entered by other paths.
- ADC should engage with the Centre for Military Education Outreach at King's College London as one means of measuring itself against international standards.
- ADC should give high priority to developing alumni groups.
- Membership of an alumni group should include a subscription to a printed journal, perhaps at a reduced annual fee (see Recommendation 10).

10. Professional identity and public perceptions

- The ADF should develop the *Australian Defence Force Journal* into a flagship journal for the profession of arms in Australia.

11. Management of ADC

- The appointment of a Deputy Commander ADC to take responsibility for the training element of ADC should be considered.
- The post of Commander ADC should be for three years to provide the necessary continuity.

Contents

Executive summary	1
1 Why PME matters to Australia	5
2 Getting PME right	9
3 How the ADF does PME	14
4 Recommendations for change in PME	27
Concluding remarks	36
Note on costings	37
Notes	38
Appendix A: Professional military education in the US	42
Appendix B: Professional military education in the UK	45
Acronyms and abbreviations	47

1 Why PME matters to Australia

The most powerful tool any soldier carries is not his weapon but his mind.

—General David H Petraeus, US Army (ret'd), 'Beyond the cloister', *The American Interest*, July–August 2007

Professional military education (PME) is the process of developing four essential qualities that are required by members of the profession of arms: intellect, expertise, ethos and leadership.¹ For the individual, it's a career-long undertaking that lasts from initial engagement through to the most senior positions—even generals can learn. It's also a significant challenge for the Australian Defence Force (ADF) which must not only determine the content and format of PME, but also ensure that personnel receive it at the right time and in the right sequence.

This report focuses first on PME in Australia. Some of the matters discussed have generated significant debate in the US, the UK and Western militaries generally. These developments are referred to where they have particular relevance to PME in the Australian setting. An indication of some of the issues in the US and the UK can be found in the two appendixes.

Second, the report addresses PME delivered in a tri-service context. Each service contributes to PME by developing its members' skills and expertise in the employment and management of its particular equipment—naval, land or air. Navy and Air Force, in particular, must master complex technology, although Army also faces technological challenges. Such expertise is developed by a mix of training and education conducted by each service and underpins the effectiveness of the ADF as a whole. Tri-service or 'joint PME' (JPME) is intended to facilitate the effective combination of these capabilities,

as is now essential in any major operation. (The term 'PME' is used here to refer to both single-service and tri-service PME unless otherwise qualified.)

Third, the report concentrates on the first of the four qualities mentioned above—intellect. This refers to the capacity of individual members of the profession of arms to think critically, analyse complex issues, understand events, and make sound judgements. It also refers to the collective or 'organisational' intellect of the ADF—its capacity as a military force to learn, utilise knowledge and adapt to new circumstances.² PME is the key factor in developing both facets.

PME certainly contributes to expertise, ethos and leadership, which are no less important than intellect in a military force but which can't be covered in detail in a short study. Expertise consists of those skills essential to the conduct of operations and supporting activities (both single-service and tri-service). Ethos refers to the intangible factors that make for loyalty and cohesion in a military force and a sense of responsibility and duty to the community.³ Leadership is the indispensable quality that ensures subordinates not only do things right but do the right thing. Each of these factors deserves a study in its own right.

PME is an essential contributor to Australia's military capability.⁴ Without educated people, the most powerful weapon platforms, the most intelligent munitions and the most rapid communications systems are of little value. Yet there's a tendency on the part of many in uniform to dismiss PME as 'too academic' or as low priority when faced with pressures of time, numbers, budgets and operations. Acquiring education appears to lack immediate and tangible pay-offs compared with acquiring weapons and warriors.

Maintaining or expanding investment in PME is all the more important because of four developments in Australia's circumstances.

First, national security policy has become more challenging as Australia seeks to adjust simultaneously to a complex and shifting global power balance and a potentially turbulent regional environment. Government policy requires the ADF to prepare for a diverse range of operations. Australia's alliance with the US and commitment to global security can take the ADF to many parts of the world, from fighting in Afghanistan to peacekeeping in Africa. If these are operations of choice (albeit limited choice), there are also regional conflicts and instabilities in which Australia may have no option but to intervene. As the 'local superpower', this country may find itself thrust into leadership because no-one else can or will take up the burden. ADF personnel must be sufficiently adaptable and intellectually agile to operate in a wide variety of situations, often at short notice.

Second, greater and more complex demands will be placed on uniformed personnel by the sorts of conflict in which Australia is likely to be involved. Most wars, as British General Sir Rupert Smith puts it, now occur 'among the people', where the 'enemy' is difficult to distinguish from the general population and is prepared to use violence anywhere against anyone.⁵ Conflicts today are often highly volatile and complex, yet force must be used sparingly and with great discrimination. In such environments, military personnel must not only operate at different levels but also comprehend the underlying nature of the conflict and the purpose of their mission. Tactics and strategies that will reduce antagonisms and build cooperative relations with local people are needed.

Third, Australian security depends in part on maintaining a technological edge over likely opponents as a way of offsetting

Australia's relatively small armed forces and vast land area. This involves not only more sophisticated weapons systems but also advanced communications, intelligence, and command and control systems. The ADF must prepare for participation in high-tech conflicts, most probably as an ally of the US, and this requires it to maintain advanced technological expertise and war-fighting skills. Yet technology is also critical in 'wars among the people' where it can help provide essential intelligence, assist in close control over tactical operations and allow highly discriminating attacks. The effective operation of hi-tech equipment requires both technological know-how and behavioural expertise in understanding how operations affect local societies and cultures.

Fourth, several specific developments in Australia present challenges for PME:

- The ADF is no longer the sole provider of security in Australia. It must cooperate (and perhaps on occasions compete) with other agencies, such as the Australian Federal Police and the border protection agencies. There's a National Security Committee at cabinet level, and the ADF is one voice among many in shaping national security policy. Those in uniform need the knowledge and expertise to make their input relevant and persuasive.
- There's a marked disparity between the professional development and succession planning for senior military personnel and their civilian counterparts in the Department of Defence, who often lack 'a strong understanding of the complexities of defence policy and the defence force'.⁶ PME needs to be extended to more civilian personnel, not only in the Department of Defence, but in other departments and agencies, with whom ADF personnel are likely to cooperate in future.

- There's a need to cater for reserve (part-time) officers, who are increasingly being called upon to make substantial contributions to Australia's military operations (as in East Timor and the Solomons) as well as border protection and domestic security.
- The traditional membership of the profession of arms has broadened to include not only commissioned officers but also senior non-commissioned officers (NCOs) and warrant officers who are taking on greater responsibilities and exercising high levels of judgement.⁷
- The attendance of overseas military personnel at residential and other PME courses in Australia has become important as a means for the ADF to develop ties with regional forces and maintain ties with traditional allies such as the US, Britain, Canada and New Zealand.
- The development of educational technology and communications permits courses to be offered in distance mode and allows the use of expert lecturers overseas through video links. Some suggest that this reduces or eliminates the need for residential courses.
- The ADF faces significant budgetary constraints in the coming years.⁸ There are likely to be across-the-board reductions in equipment purchases, facilities, training opportunities and personnel numbers, and PME may struggle to maintain its share of the pie. However, the key factor in maintaining the ADF's capability and effectiveness in straitened times is smart, adaptable, imaginative and professional personnel.

PME is also important for the ADF in maintaining its status in the community and in the eyes of politicians. Service personnel

have a high and deserved reputation for the conduct of operations in the field, but the ADF's individual and collective intellect is rarely on display. Instead, the media offer up a steady stream of failures and scandals—from a lack of amphibious vessels to misbehaviour at the Australian Defence Force Academy (ADFA), and from cost overruns to concerns about military culture. Constant reviews and inquiries take place, attracting adverse publicity that's difficult to counter. A comprehensive PME system won't guarantee against such problems, but should equip military personnel with better insight and skills to foresee and deal with difficulties before they become unmanageable.

Finally, the magnitude of the task of providing PME shouldn't be underestimated. The ADF has around 59,000 full-time members, of whom some 14,100 are officers or officers in training. They're the primary target of PME, but to them should be added some senior NCOs, some of the 7,000 ADF Reserve officers and about 6,400 civilian executive-level officers in the Department of Defence. These aren't small numbers, given that PME is a costly, continuous and career-long process.

Criticisms of PME in Australia

A great deal is expected of PME, and it's attracted considerable attention over the years—not only from military personnel but also from the media, parliament, academia and the community at large. Often, the attention has been highly critical.

In a bipartisan report in 1995, for example, a parliamentary defence committee recommended the abolition of ADFA and the use of civilian universities to educate future officers.⁹ The main reasons were the cost of ADFA compared with the cost of recruiting officers from civilian university graduates and the closed nature of the academy, which was dubbed a 'military monastery' by the

chair, Roger Price, in his tabling speech.¹⁰ In 1997, former Army officers Graeme Cheeseman and Robert A Hall advocated opening up ADFA to civilian students and its reinvention as a tri-service ‘special conditions’ reserve unit along the lines of a large-scale university regiment attached to University College, UNSW.¹¹

In 2004, Professor Jeffrey Grey of University College, ADFA, argued that PME in Australia was suffering from several fundamental problems, especially in the post-commissioning element. There was a lack of coherence resulting from failure to align different stages and to develop a unifying philosophy. Grey also criticised an indiscriminating drive to outsource curriculum development, course content and delivery to universities, as well as the related scourge of ‘credentialism’—the desire to provide university qualifications for staff college students regardless of the quality or relevance of those awards.¹² Another critic saw this as ‘an outsourcing of intellectual responsibility’ on the part of the ADF.¹³

PME has also been criticised for its failure to prepare officers for command of operations. In 2008, a resident academic at the Australian Defence College accused the ADF of having a ‘closed mind’ about that need and of falling behind those overseas military forces that it’s most likely to be deployed with.¹⁴ Equally trenchant at that time was retired Major General Jim Molan, who asked whether our senior military leaders in the East Timor intervention were successful because of ‘our JPME system or were they competent despite it?’ Teaching generalship, he argued, was neglected at the Centre for Defence and Strategic Studies (CDSS), while at the Australian Command and Staff College (ACSC) majors (and equivalents) were taught generalship by lieutenant colonels.¹⁵

However, the ADF has not been inactive on PME. Important changes have been made during the past two decades, often amid much debate. ADFA survived the Price report, but other PME institutions were closed as the ADF itself moved to promote greater ‘jointery’—the ability of the three services to operate in unified fashion. In 2001, the three single-service staff colleges at different locations were combined into the ACSC for officers at the major level (and Navy and Air Force equivalent levels) based in Canberra. From 1994, officers at colonel/brigadier levels had been educated at the Australian College of Defence and Strategic Studies, a new institution in Canberra that evolved into the CDSS in 2001.¹⁶ The Joint Services Staff College, which had catered for lieutenant colonels and equivalents from 1970, closed down in 1998.

In 1999, an umbrella organisation, the Australian Defence College (ADC), was established to bring greater coherence to the process of PME at all levels and to make better use of related learning centres in the ADF as well as ADFA, ACSC and CDSS. The charter of the ADC sees it as ‘Defence’s centre of expertise in vocational and professional education and training, together with related research in areas of Defence interest’.

As well as institutional change, developments have taken place in the curricula of ADFA, ACSC and CDSS. At ADFA, future officers have undertaken more strategic studies and management units, while offerings in military ethics have expanded. In 2007, a review of ADF joint education and training by Major General David Morrison identified deficiencies and made recommendations for change. In recent years, for example, both ACSC and CDSS have introduced more material relevant to the sorts of operations that the ADF is likely to be engaged in.

ADFA has now been in place for over 25 years and the ADC, ACSC and CDSS over 10 years. It seems timely to ask how well they're performing and how they might change in the future. As General Hurley, then Vice Chief of the Defence Force, observed in 2011:

[R]eform of the ADF's education and training model is an important element of the Defence Department's current reform agenda. There is certainly a view shared by many in the ADF that we have the opportunity now to create a professional officer development system that will enable us to produce the military leadership that can meet our future challenges.¹⁷

The following sections examine how the ADF is facing up to this task.

2 Getting PME right

[F]or too long we have been training leaders who only know how to keep the routine going. Who can answer questions, but don't know how to ask them. Who can fulfill goals, but don't know how to set them. Who think about how to get things done, but not whether they're worth doing in the first place.

—William Deresiewicz, American author and critic, address to the plebe class at the US Military Academy, 2009, reprinted as 'Solitude and leadership' in *The American Scholar*, Spring 2010

This section examines the generic problems inherent in delivering effective military education to the profession of arms. In practice, education is often linked conceptually and organisationally to training. Both seek to prepare individuals for future roles and tasks by providing them with knowledge and skills. Though grey areas exist, there are critical differences between the two.

Training focuses on practical activities, particularly those that are predictable and repetitive and can be done in right way or a wrong way. It's a matter of acquiring knowledge, skills and attitudes relevant to specific tasks and activities. Training thus relates to 'doing' more than 'thinking'. Practice and rehearsal are important—hence the principle: 'train for certainty, educate for uncertainty'.¹⁸

Education develops skills, capacities and moral values that are relevant to all aspects of life. Among other things, education is about building in the individual a capacity for learning and an ability to think critically, to analyse, to describe, to deduce and to make judgements—in short, to exercise reason and imagination. As Sir Michael Howard put it, referring to study of the past, 'the true use of history ... is ... not to make men clever for next time; it is to make them wise forever'.¹⁹

Professional military education develops these qualities as they relate to the diverse activities of the profession of arms. It assists individuals to analyse, investigate and research complex issues that they might face as military officers—issues that will often be unexpected and unpredictable, complex and challenging. The focus of PME can't be limited to purely military matters, but embraces the wider context in which armed forces are employed. PME is intended to provide a broader perspective on all military activities and a deeper understanding of them.

The key objectives of PME reflect the four qualities identified earlier in section 1:

- to develop the qualities of intellect associated with the use of reason and imagination and the desire to continue learning
- to provide military personnel with the expertise required for war-fighting and other roles

- to develop and sustain the spirit and ethos of the profession of arms, including the desire to behave loyally, ethically and responsibly
- to prepare and develop future leaders in the profession up to the highest levels.

The third objective is often underrated as part of PME i.e. the need to encourage behaviour consistent with the highest moral and legal standards of the profession of arms. Significantly, after abject ethical and legal failures in Somalia, the Canadian Defence Force sought to revive its sense of professionalism in part through greater emphasis on education at all levels of the officer corps.²⁰

PME can be presented at any rank and in diverse formats, from a liberal university education through to exercises in war fighting and the higher conduct of operations, and everything in between. It can be conducted collectively in institutions or individually through private study, and it may take place before practical application, ‘on the job’ or as ‘lessons learned’. Moreover, PME is one activity among many, competing for the time and attention of personnel with other essential elements of a military career, such as training, operations, administration and command.

Providing for PME presents challenges for all military forces, including difficult questions about military issues, means of delivery and pedagogical matters. These are considered here in turn, with a focus on the education of commissioned officers rather than officer candidates.

Who owns PME—one service or three?

Any significant military operation these days is likely to be ‘joint’, in that it requires the coordinated employment of land, sea and air

capabilities. The profession therefore needs to produce commanders familiar not only with their own service but also sufficiently familiar with the wide range of expertise across the whole defence force. The accepted wisdom is that officers need to understand their own service before they can properly appreciate the demands of joint operations.

The question here is at what point does JPME come to be more important than continued single-service PME? A service may believe that an officer needs more single-service PME than JPME; at the same time completed single-service PME might not have prepared the officer for JPME in the best way. As a compromise, a JPME course may well include single-service components, thereby reducing the benefits of ‘jointery’. A workable balance between single-service PME and JPME must constantly be determined.

Who carries the personnel burden?

PME makes two sorts of demands on the military personnel system. First, staff must be provided to run the institutions involved, whether in uniform or not. Ideally, those in uniform will be drawn from the cream of the officer corps so they provide the best education and the best exemplars for students. In practice, of course, every element of the armed forces seeks to obtain the best personnel—a contest not all can win.

Second, personnel managers ideally select for PME those officers who promise to make the best commanders and leaders of the future. However, a 6-month or 12-month course takes talented personnel out of the pool from which other military positions must be filled—a challenge that’s exacerbated if there’s already some ‘hollowness’ in staff establishments and the force is maintaining a high tempo of operations. The risk, in the words of one US Army general, is that the armed forces will consider themselves ‘too busy to learn’.²¹

The converse problem occurs when a service sees staff college as a convenient place to park officers to get them out of the way, to fill in time before a ‘real’ posting or to offer a comfortable berth before retirement.

Residential courses—costs and benefits

There’s much debate about the value of residential courses (i.e. those that require lengthy attendance at an institution, with students accommodated on or off base). The principal objections are the cost of maintaining the necessary institutions, the personnel burden in providing staff and students, and the view that classroom learning can’t substitute for practical lessons or learning on the job.

The merits of residential courses include:

- Bringing a wide range of personnel together for an extended period encourages the creation of mutual confidence and the building of informal networks.
- In joint institutions, personnel can acquire a degree of familiarity with other services and with the higher direction of the defence force.
- Residential courses are a powerful means of transmitting the culture and beliefs desired by the military leadership.²² Values imparted in this way can do much to counteract the sometimes perverse interpretations of military culture found in local units from time to time.
- Educational institutions are able to present students with ideas and arguments using some of the best available subject matter experts, while ensuring that students undertake a sustained and challenging learning process.

- Longer residential courses allow students to become immersed in learning and, with the right sort of guidance, to develop lifelong habits of the educated mind, such as participation in debate and discussion, sensitivity to the perspectives of others, recognition of the limits of one’s own knowledge and the desire to continue learning.
- Longer courses are an important means of bringing together regular and reserve officers, between whom there’s commonly a certain cultural prejudice and mistrust.²³
- Residential courses allow extended participation by officers from overseas forces.²⁴ This helps military personnel learn about other nations and make personal contacts with overseas officers; it also helps educate the latter about the host nation. The informal networks created in this way can be valuable means of communication and influence among military forces.
- Participation in residential courses by civilians from government and non-government agencies helps create mutual understanding and personal networks between personnel likely to be working together in the field of national security.

E-learning—options and opportunities

Information technology and communications have greatly improved the effectiveness and quality of learning, creating new options for PME, whether in institutions or outside. For example, staff colleges can provide real-time presentations by leading subject matter experts anywhere in the world, including live question-and-answer sessions. Current technology also allows highly realistic simulation exercises, which can create some

of the psychological pressures likely to be felt in the field. For their part, students on residential courses have come to expect a sophisticated use of technology in the presentation of material and to have direct access to the internet to gather information and conduct research.

The greatest changes wrought by e-learning relate to the ability to deliver courses of study to personnel who are posted to remote locations or who wish to study in their own time (and perhaps their own home). Distance learning is probably best suited to shorter courses for which material can be focused and presented in manageable doses. The disadvantage is that taking courses in this way doesn't provide the intangible benefits gained from personal contacts among course members and teaching staff. Teleconferencing and the like may compensate for this deficiency to some extent.

Certainly, distance learning can provide a valuable adjunct to residential courses. For example, intending students can prepare in advance, while students who've failed or missed units at a staff college can catch up on those units. Reservists, in particular, can benefit from taking some parts of staff college courses in distance mode, thereby reducing the length of time they spend on a residential course.

What's to be taught?

The question of what to teach has bedevilled staff colleges ever since their invention about 250 years ago. Just because PME is about the application of military force to achieve objectives set by government does not make it a simple proposition. The use of military force is never simple and it never takes place in a vacuum. It's always shaped by its physical, technical, organisational, social, psychological, political, legal and ethical contexts. There's never any certainty about the sort of war a nation will be engaged in next.

Few aspects of knowledge and learning aren't relevant directly or indirectly to the profession of arms.²⁵ The fact is that no military professional can hope to master all aspects of every field of knowledge that might be useful. An attempt to cover everything will make the curriculum 'a mile-wide and an inch-deep'. It may even be difficult to agree on the essential elements of a curriculum, while an agreed curriculum may prove to be focused on the wrong thing.

One key factor in shaping a curriculum is the prevailing nature of conflict. If that changes, so too will the roles and tasks assigned to the military forces, and so should the PME curriculum. The diverse forms of mission ('war among the people', peacekeeping, stabilisation, counterinsurgency, border security, counterterrorism and so on) have now come to compete for inclusion in the PME curriculum along with—or against—the traditional focus on major conventional wars using high-tech weapons. This is a tension all PME systems must deal with.

At the same time, ideas and practice concerning the relationship between operations, strategy and policy are constantly changing, as are considerations about how to design and plan military activities. Compared with normal arts curricula in universities, change is faster and the demands of the real world more pressing. Keeping up to date is a 'complex balancing act' akin to keeping up with the most recent legal decisions in a law school or the latest surgical techniques in medical school.²⁶

Who should teach the curriculum?

Presenting PME requires expertise in many areas, and it's rare for a military force to have the requisite knowledge among those in uniform. In the West, only the US forces are large and well-resourced enough to be able to provide a significant proportion of their

own instructional staff—perhaps bolstered by the dubious assumption that ‘every officer is a [good] teacher’ simply by virtue of being an officer.²⁷ In practice, the US military also employs civilian experts for substantial elements of its PME, and has been mandated by Congress to do so. The common challenge is how best to integrate civilian educators into a military system.

By and large, US PME institutions place civilian academic staff into a military-led hierarchy. This has led to complaints that the military doesn’t understand concepts such as academic freedom, creativity in the curriculum or the professional obligation and desire of academics to conduct research and publish findings. As one US critic puts it, a military academy ‘has a way of making liberal education feel like a subversive activity’.²⁸ The situation isn’t much improved if retired military personnel are appointed as civilian academics, including in positions of leadership, since they often lack academic values and skills and retain a fundamental loyalty to the military.²⁹

Smaller forces usually have few personnel academically qualified for tertiary-level teaching and have no choice but to draw on outside subject experts, most of whom are found in universities. This presents two difficulties. One is getting the right balance in the curriculum between material of direct relevance to military personnel and material appropriate to tertiary-level courses. The second is the question of standards if a tertiary award such as a degree or diploma is to be granted for the completion of a PME course. The desire for such credentials can place the armed forces at a disadvantage when negotiating with universities to offer courses. It can also lead course members to see themselves as engaging in PME to obtain these credentials, rather than to study essentially military matters.

Is staff college really necessary?

There’s continuing debate about whether attendance at a staff college is really necessary. On the one hand, military personnel may believe their prospects for promotion are boosted more by taking up command or other critical appointments than by undertaking a lengthy residential course deemed to be of little practical value. In the US, the level of deferment in some colleges is high because officers believe ‘it is more important to have made the “quality cut” evidenced by selection for a senior level college than to actually attend’.³⁰

Service attitudes to the value of staff college also vary. Some rate learning and training on the job more highly, so that attendance even at the service’s own staff college is not a requirement for promotion. Attendance at a tri-service college is even more of a distraction. This flows through to the way each service regards results at staff college as relevant to future promotion. For some, attendance is an essential requirement and the level of performance at staff college is taken into account.³¹ Another service will promote more on the basis of performance in command or operational posts than on performance at staff college.

The value of staff college can also be questioned on the grounds that virtually no-one fails. Is it a case of ‘no fail, no gain’? If everyone passes, where is the incentive to excel? Moreover, removing students from a course or giving them a fail grade at the end may seem too difficult, since so much has already been invested in their careers that they are ‘too important to fail’.³² This is all the more so when personnel shortages exist and failure means an officer couldn’t be promoted or would choose to resign.

On the other hand, students at staff colleges tend to be well motivated even if they’re there somewhat reluctantly. A poor performance

will look bad even if a good performance isn't seen as particularly valuable or relevant. It's also the case that failure rates are often high at the precommissioning stage when unsuitable and unmotivated officer candidates are removed.

Self-directed learning

Great military leaders often praise self-directed learning—the PME that occurs outside colleges or barracks and is undertaken by officers at their own initiative and in their own time. It may take the form of reading widely, making notes and observations, studying for a university degree or writing for publication. Such self-directed learning may extend to casual discussions or engagement in debates with colleagues. Informal mentors can also be of great assistance in this context.³³

However, self-directed learning is rarely a substitute for learning at a staff college or similar institution, but is a valuable and highly desirable complement to more structured learning. Many of the great military leaders and thinkers from Clausewitz onwards have had a voracious appetite for private reading and learning, but most have attended staff colleges as well. Clausewitz himself was a student, a lecturer and a director at a war college at various points in his career.

What's the value of staff college?

If some officers can succeed without going to staff college, why do others need it? The answer lies in the educational experience of being presented with a variety of ideas and arguments and being compelled to debate and discuss complex issues with staff, fellow students and visiting experts. Much can be learned from private study, from colleagues and on the job, but ideas are best developed by close interaction with others. An outstanding few can thrive without this, but a PME system must cater for the many.

Measuring the value of staff college requires a demonstration not only of what's been gained by attendance but also of what exactly is lost by non-attendance. The benefits of PME to the individual and to the organisation are generally long-term and indirect compared with training or with experience gained on operations. This can lead to the neglect of rigorous evaluation. The fact that all or most senior officers have been to a particular staff college doesn't in itself prove that the course made them better officers; it may simply mean that the course was compulsory if they wanted promotion. Evaluating education courses is an art in itself.

The ultimate test of a PME system, of course, is war. Here, at least, there are clear examples—such as the US Army before Vietnam—where failure to invest wisely in PME carried a heavy price. By contrast, the rigour and excellence of US PME in the 1930s returned good dividends in World War II. The test of war, however, is always after the event.

3 How the ADF does PME

[T]he officer PME system in Australia is in profound disarray, and is fundamentally failing the organisation of which it should be the intellectual gatekeeper and guiding beacon.

—Professor Jeffrey Grey, University College, ADFA, 'Professional military education and the ADF', *Defender*, 21(3), Spring 2004

PME in the ADF takes a wide variety of forms, ranging from the largely academic to the severely practical, from single-service to tri-service, from individual-based to group-based, and from formal to informal. While small numbers of ADF officers are sent to overseas staff colleges at mid-level and senior level, a large number go through PME in Australia.

This section gives a brief outline of PME (primarily JPME) as it exists today and the organisations that are engaged in it.

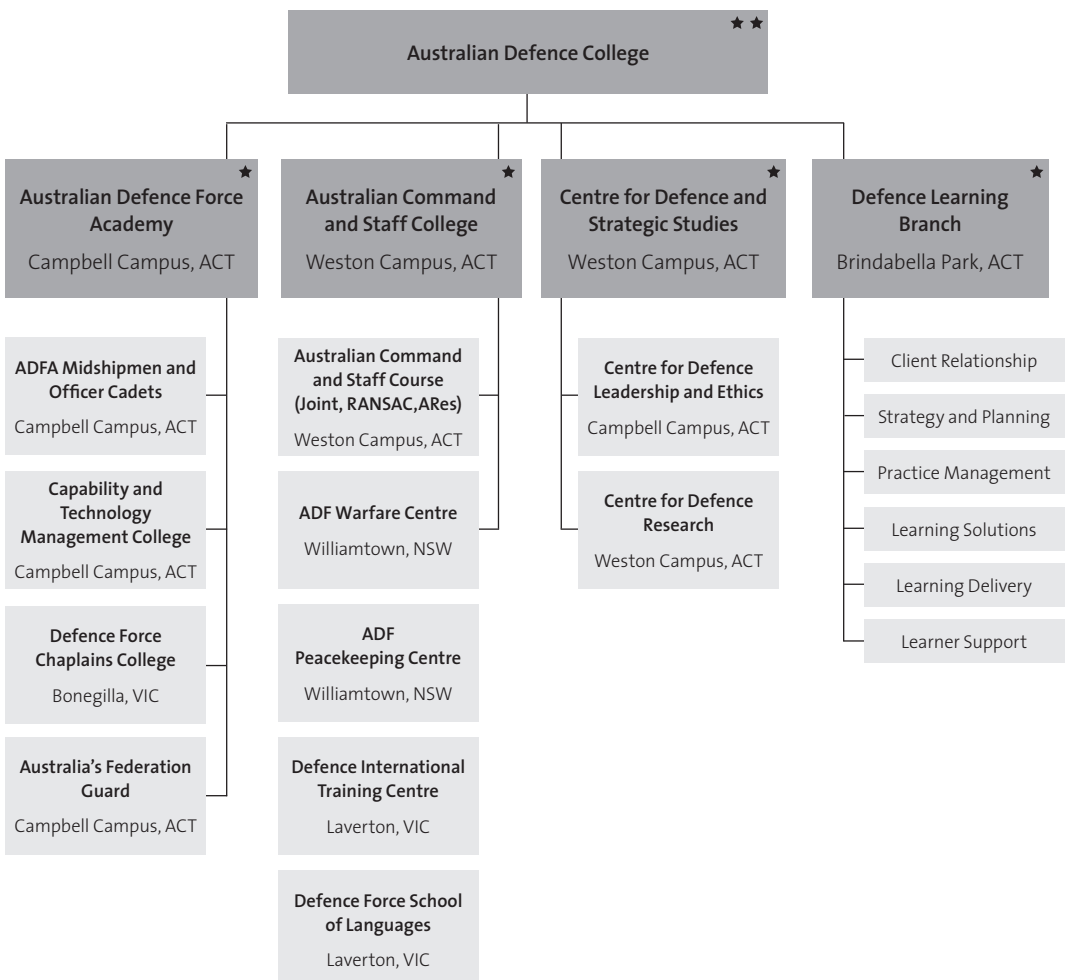
Australian Defence College

The ADC is a tri-service organisation headed by a two-star military officer. It includes four principal organisations for JPME: the Australian Defence Force Academy (ADFA), the Australian Command and Staff College (ACSC), the Centre for Defence and Strategic Studies (CDSS) and the Defence Learning Branch—all at one-star level.

The Defence Learning Branch was established in 2012, as Defence recognised its diminishing ‘capacity to analyse education and training

needs and evaluate outcomes’. Its aims are to determine ‘how people will learn in a future Defence environment’; to ‘develop enabling systems to underpin access to learning and assessment at a time and place to suit the learner’; and to ‘generate and drive longer-term reforms’.³⁴ It also manages the accreditation of ADF courses. The Defence Learning Branch was created in response to fundamental shifts in learning and teaching in the age of digital communications and decentralised knowledge.

Seven other ‘Learning Centres’ are also part of the ADC: the Capability and Technology Management College, the Defence Force Chaplains College, the ADF Warfare Centre,



the ADF Peacekeeping Centre, the Defence International Training Centre, the Defence Force School of Languages and the Centre for Defence Leadership and Ethics. After ADC consolidates these functions by the end of 2012, it will enjoy an annual budget of around \$400 million and employ more than 1,000 military and civilian staff.³⁵ In the longer term, it's planned to bring those units currently located outside Canberra to a single site in the capital. At the same time, the role of the ADC is growing from 'delivering education and training to greater strategic responsibility for oversight and governance of the Defence education and training system'.³⁶

The three main JPME institutions in the ADC are ADFA, which provides initial military training for officer candidates while the University of New South Wales (UNSW) provides their academic courses leading to bachelor's degrees; ACSC, which prepares officers at the rank of major (and equivalent) for more senior postings with academic input provided by the Strategic and Defence Studies Centre of the Australian National University (ANU); and CDSS, which is designed to develop colonels (and equivalent) for higher leadership positions and which has a cooperative arrangement with Deakin University. All three are residential courses, but each has distinct characteristics and its own way of delivering PME.

One common factor is that all have found it necessary to come to some kind of arrangement with a university to secure the necessary subject matter expertise and pedagogical skills in curriculum design, teaching methods and educational technology. Each also offers qualifications with university status to those undertaking PME—compulsory in the case of ADFA, optional in ACSC and CDSS.

Australian Defence Force Academy

'ADFA' is shorthand for what are two co-located institutions:

- the Defence Academy itself, which is a military unit whose members—staff, Army and Air Force officer cadets and Navy midshipmen—are under military command headed by a Commandant
- the University College of UNSW, headed by a Rector, which enrolls academically qualified cadets and midshipmen for bachelor's degrees, employs academic staff and determines the curriculum in consultation with ADFA and Defence.

Officer candidates for all three services undertake limited military training at ADFA while pursuing a full-time university education at University College, UNSW, over a period of three years or four years in the case of honours and engineering students. As the ADFA website puts it, this combined academic and military program is designed to allow cadets 'to develop their professional abilities and the qualities of character and leadership that are appropriate to officers of the Defence Force'.

About one-third of new ADF officers are graduates of ADFA.³⁷ This is a significant percentage, and a higher proportion of those who will go on to senior ranks and become the most influential members of the military profession.

Table 1 shows undergraduate military enrolments in years 1 to 4 in recent years. The total is around 1,000 at any one time, of whom about 21% are female. Navy's percentage of females is highest at around 31% and Army's lowest at around 17%. In each service, the proportion of females at ADFA is higher than that among commissioned officers (in 2011, Navy 19.0%, Army 13.9% and Air Force 18.3%). This suggests that, depending

Table 1: Initial composition of midshipmen, officer cadets and advanced students (years 1–4) at ADFA, by service and gender, 2009–2011

Year	RAN	Army	RAAF	Total
2009	148	450	380	978
Female (%)	50 (33.8%)	65 (14.4%)	86 (22.2%)	201 (20.6%)
2010	150	480	375	1005
Female (%)	49 (32.7%)	78 (16.3%)	84 (22.4%)	211 (21.0%)
2011	172	501	357	1030
Female (%)	53(30.8%)	88 (17.6%)	79 (22.1%)	220 (21.4%)

Source: ADFA annual status reports.

Table 2: University College, ADFA, full-time staff equivalents

Year	Male academic staff	Female academic staff	Total academic staff	Academic plus general staff
2009	153	31	185	364
2010	162	41	203	382
2011	153	46	199	366
2012 (31 March)	163	37	200	366

Note: Figures are rounded.

Source: ADFA annual status reports.

on service-specific attrition rates after commissioning, female enrolments at ADFA have fed into the rising proportion of female officers in recent years.

Separations from the ADF occur in all years but are highest in first and second years (roughly 10% annually), falling away markedly by third and fourth years to a maximum of under 4%. Female separations are generally lower proportionately than male separations.

There are limited numbers of overseas military students and a few civilians in the undergraduate body. The Defence Materiel Organisation sponsors civilian staff in the engineering undergraduate program, while the Defence Science and Technology Organisation may sponsor civilian students in the science program in future years. In addition, there are plans to admit a number of ADF reservists to undergraduate study at ADFA from 2013; they will enrol as civilians and live off campus.

Postgraduate study at University College has been open to civilian and military students since its inception in 1986. Courses offered range from postgraduate diplomas to PhDs with total full-time and part-time enrolments numbering over 1,600 in April 2012. Some 1,280 students are undertaking coursework programs and 330 research degrees. A substantial proportion are ADF and Department of Defence personnel, some of whom are enrolled on their own initiative.

Academic staff at University College number around 200 and are organised into four schools: Business; Engineering and Information Technology; Humanities and Social Sciences; and Physical, Environmental and Mathematical Sciences. The 170 or so general staff include those in the Academy Library, which is a national resource on military and defence subjects.

Table 3 shows the output of University College in recent years. In 2011, for example, 322 bachelor degrees were awarded, virtually

Table 3: University College, ADFA, undergraduate and postgraduate awards conferred, 2009–2011

Year	Bachelor degrees	Postgraduate coursework	Postgraduate research (excluding PhDs)	PhDs	All degrees
2009	270	428	7	32	737
2010	259	607	8	26	900
2011	322	607	11	34	974

Source: ADFA annual status reports.

Table 4: ADFA total operating costs (\$million)

Financial year	Total cost	Paid to UNSW	Military salaries	Defence Support Group ^a
2008–09	\$88.1	\$44.5	\$39.5	\$0
2009–10	\$140.6	\$49.2	\$46.4	\$40
2010–11	\$104.2	\$52.7	\$46.8	\$20

a The level of defence overhead costs attributed to ADFA is a matter of discussion.

Source: ADFA annual status reports.

all going to ADF personnel. Postgraduate awards were nearly double at 652; most were by coursework, while a significant number (45) entailed research.

UNSW is paid for its services by the Department of Defence under an agreement that was initially set at 10 years. The agreement is reviewed every five years with a view to extending it a further five years beyond the expiry date. The cost of University College in 2010–11 was around \$52 million, which was about equal to the military budget for the academy (Table 4). The bulk of ADF costs are for military salaries, of which the largest component is paid to cadets; in addition, an overhead cost attributed to the Defence Academy has been calculated at widely varying levels.

Defence has periodically stated that the University College meets its requirements, including the accreditation of engineering courses by the Institution of Engineers Australia and the addition of new subjects in response to ADF needs. The college has also greatly expanded its postgraduate offerings to include many of particular relevance to the

ADF, such as the Master of Defence Studies in 1987.

The relationship with UNSW dates back to an agreement with Defence in 1967 whereby the university established a faculty at the Royal Military College (RMC) Duntroon to provide undergraduate degrees to Army officer cadets. This relationship with UNSW led through many twists and turns to the creation of a University College of UNSW at ADFA in 1986.³⁸

One reason for the success of the arrangement is the separation between academic and military organisations. In contrast to US cadet academies and staff colleges, there's no attempt to integrate academic staff into a single military hierarchy or place them under the control of the Department of Defence, with all the consequent problems noted above. The apparent anomaly of having two chief executives on one campus—the Rector of University College and the Commandant of ADFA—has been overcome by a clear division of labour between the two organisations and by a shared preference for settling

problems on campus rather than taking them up the UNSW or ADF hierarchy. In sum, the relationship between Defence and UNSW has become institutionalised. Both sides have come to understand each other and learned how to work together.

Key issues

Study first or salute first?

Army and Air Force cadets mostly join ADFA at a young age (between 17 and 19 years) and have limited exposure to practical military life for four years or so. Midshipmen (male and female Navy officer candidates) also used to come directly to ADFA but now do the Naval Officer Year One course (six months basic training plus six months advanced training at sea) before joining the academy if they prove suitable. However, it's possible that Navy will reduce the initial 12 months military training to six months. Air Force and Army are considering a similar approach to that of Navy.

Traditionally, Army has taken its officer candidates directly into a four-year course of academic study combined with military training before commissioning—a pattern followed from 1911 to 1985 at RMC. Since 1986, Army graduates from ADFA have transferred to RMC for one year of full-time military training; they join an 18-month direct entry officer training course at the six-month point, and both groups are commissioned together from RMC.

These different approaches reflect a longstanding debate in Australia. On the one hand, there's value in providing young people, often straight from school, with immediate experience of full-time military life. This gives them a chance to try out their chosen career and assists the service to assess their potential for commissioning at an early stage. In addition, early military training gives young people time to develop some maturity before

commencing university studies. In turn, this reduces the burden on ADFA in taking responsibility for large numbers of cadets and midshipmen who are relatively young and immature. It was to counter this problem that the Broderick review of the treatment of women at ADFA in 2011 recommended one year of military training for all cadets before attendance at ADFA. Defence has agreed to examine this option.³⁹

On the other hand, lengthy initial military training is more costly than funding undergraduate study and may dissuade some trainees from a military career altogether. More critically, skills and expertise that are acquired in the first year may well be lost during the three subsequent years of education and may need to be relearned at the end or at least kept topped up. As a general principle, skills are best applied immediately after they've been learned and newly commissioned officers are posted directly to military units.

To allow time for the initial military training it recommended, the Broderick review proposed a more intensive two-year degree in place of the standard three-year degree. A two-year degree doesn't seem practical on academic grounds, save at great cost, but two and a half years could be feasible. A shorter time for degrees has some merit, although it may create a 'busy' course with less time for reading and reflection unless military demands are reduced considerably in the light of prior training—though, as noted, top-up may become essential. A shorter degree also risks losing credibility for the course, given that the great majority of bachelor's degrees in Australia remain at three years.

Diversity

A major criticism of ADFA made in the 1995 Price report concerned the lack of diversity in the student body. This has been ameliorated

somewhat by the presence of a small number of civilian undergraduates, to be supplemented in the near future by additional Defence civilians and by a number of ADF reservists who will study for undergraduate degrees. It wouldn't be surprising to find that there's a large demand from reservists to attend ADFA and that their numbers will grow considerably.

Price's alternative to ADFA was to recruit officers from civilian university graduates, as occurs in the UK. The principal drawbacks of this approach are the uncertainty of the recruiting environment in universities and likely fluctuations in the numbers that could be secured; the difficulty of tailoring a curriculum in a civilian university to meet the needs of officer candidates (for example, in engineering); the value of attracting teenagers considering a military career into the ADF before they enter civilian universities and look to other options; the absence of a tri-service environment at the outset of an officer's career; and the loss of an opportunity to influence cadet values appropriately.⁴⁰

The Price report also criticised the high cost of ADFA compared with recruitment from civilian universities. It's certainly the case that the small scale of ADFA and its extensive overheads compared to most civilian universities mean that its cost per graduate is higher. However, the margin is reduced if the relatively high pass rate of students at ADFA is taken into account. Much also depends on the type and scale of program that would be required to ensure that enough civilian graduates could be recruited. The costs of closing ADFA and transitioning to a new system also need to be factored into any analysis.

Other issues

A problem that has beset ADFA is the high turnover of commandants. Since

ADFA opened in 1986, there have been 16 commandants compared with six rectors of University College. Defence has accepted the recommendation of the Broderick report that the term of appointment of the Commandant be a minimum of three years.⁴¹

Academic instruction and curriculum development are overwhelmingly conducted by civilian staff. There has long been an option for small numbers of military officers to provide academic instruction as Visiting Military Fellows, and some have proven highly successful, but the services find it hard to make qualified people available for long enough (preferably two to three years).

One discipline that is largely absent from the curriculum at ADFA (in contrast to its US and Canadian counterparts) is behavioural science—sociology, psychology and anthropology. The grounds for expanding this field at ADFA are argued more fully in Section 4 of this report.

Australian Command and Staff College

The ACSC, according to its website, 'aims to prepare selected career officers for command and staff appointments at the O5 level (lieutenant colonel and equivalent) in single Service, joint and integrated environments'. This entails an 11-month residential course at Weston Creek in Canberra for attendees from all three services, mainly at the rank of major or equivalent. In addition, selected NCOs attend parts of the ACSC course, while a Joint Warrant Officers Course is planned for 2013.

The course normally has around 175 members—about 120–125 from the ADF, about 45 overseas personnel, plus Australian civilians (Table 5). Females make up between 10% and 14%. The graduation rate is very high at 99%, reflecting partly the presence of suitable candidates and partly the importance to individuals of passing the course. Army

Table 5: ACSC course members and graduation rates, 2009–2012

Course members	2009	2010	2011	2012
RAN	26	25	23	15 ^a
Army	68	63	68	60
RAAF	29	37	30	33
Overseas	43	44	43	46
Australian civilians	9	9	9	6
Total (female)	175 (19)	178 (21)	173 (24)	160 (16)
Graduation rate	99%	99%	99%	-

a The RAN reduced its participation by 15 course members at short notice to address recommendations of the Rizzo report on naval maintenance.

Source: ACSC.

makes explicit use of an officer's performance at ACSC in determining future employment and promotion. This is less important in Navy and Air Force, but still a factor.

The personnel burden in running the ACSC is not great, involving between 22 and 28 ADF members, including a one-star appointment and two to seven female officers. Around six overseas military personnel and a similar number of Australian Public Service members also contribute to the management of ACSC. There was one academic staff member until 2012, when the ANU took over the academic component of the course.

A three-year contract with UNSW at ADFA to provide academic courses came to an end in 2011. The ACSC has now signed a 10-year agreement with the Strategic and Defence Studies Centre (SDSC) at the ANU to provide substantial elements of the course from 2012, at an average cost of about \$1.78 million a year over the period. While this development has attracted some criticism relating to the choice of provider and the length of the contract, there seems to be merit in the new arrangement.

SDSC has acknowledged expertise in the required areas and has taught postgraduate courses in relevant subjects at the ANU campus. While some critics see the curriculum as possibly subject to influence by a small

number of subject experts at SDSC who are associated with particular views on Australian defence, that perception can be countered by ensuring that a diversity of views is presented, including by outside experts.

A major positive aspect of the new contract is that four or five academic staff from SDSC plus an administrator are physically located at ACSC and are available to assist course members. A 10-year timeframe—rather than three years—will also assist in attracting and retaining staff, and in developing the desired mutual understandings between the academic and military sides. With careful management on both sides, what's now called a 'partnership' by SDSC may develop into a more institutional relationship similar to that of UNSW and ADFA.

The ACSC course is designed to be academically demanding enough to warrant the award of some kind of university qualification, from a postgraduate certificate or diploma to a master's degree in military studies—or, where candidates complete an additional 15,000 word sub-thesis, a master of arts. For its part, the ANU must ensure that proper academic requirements for an award are set and met. Failure to do this would lower the status of the award for recipients, undermine the university's standing, and short-change Defence.

Key issues

ACSC replaced three long-established single-service staff colleges, each of which had its own history and distinctive characteristics. It's no surprise that the balance between single-service and tri-service interests in the curriculum at ACSC is often difficult to secure and to maintain. Various accommodations have been made to cater for service interests, including single-service components in the course. Clearly, if the course doesn't seem to meet the interests of a service, that service will be reluctant to send enough people and its best personnel.

The ACSC doesn't select its students or impose academic entry requirements. This leads to a student body with diverse educational backgrounds, some of whom may need to be brought up to speed either before attendance or during the course. Others are ahead of the game and need to be challenged intellectually.

Taking some 120 ADF officers out of the so-called 'mainstream' for 12 months places demands on the personnel system of each service, particularly because of the high operational tempo in recent years. From time to time, members are taken off the ACSC course by their service to meet pressing operational requirements. This is undesirable, if unavoidable.

The relatively frequent turnover of commandants of ACSC has created some difficulties. There have been 10 since 1999, including seven since 2005. As with ADFA, it would be desirable to set three-year appointments. The different leadership styles of the services have created some tensions, but this can perhaps be seen as a good example of learning 'jointery' in practice.

Centre for Defence and Strategic Studies

The CDSS is the 'senior educational institution of the ADC'.⁴² Course members include ADF and overseas military officers (mostly at the colonel level or equivalent), senior government officials and members of related security organisations, such as police and emergency management agencies. The centre's objective is to impart the 'knowledge and skills required by commanders, strategic leaders and managers engaged in national security issues', including policy skills needed to understand and operate effectively in the complex security environment of the modern world; leadership and decision-making skills; and a deep understanding of global, regional and national issues of defence and strategic importance.⁴³

The first principal of CDSS's predecessor institution was a recently retired Chief of Air Staff, who stressed the importance of the college in the following terms:

There is nothing more important in the preparation of people for senior positions in the defence hierarchy than to be intellectually challenged in a sustained and directed manner on those issues they will confront in the last and most important phase of their professional lives. Twelve months is the minimum period for that to be achieved.⁴⁴

The focus is clearly on developing senior leaders, but it's evident that the course is also valuable for those subsequently posted overseas as defence attachés.

Around 15–17 ADF personnel and 5–7 Australian public servants attend CDSS each year (Table 6). They make up about 50% of the course numbers; the remainder are mainly overseas attendees plus a handful of non-Defence civilians. Staff total 15 to 18, of whom four to six are drawn from the ADF.

Table 6: CDSS course members, 2009–2012

	2009	2010	2011	2012
RAN (Female)	5 (1)	4	4 (1)	5
Army (Female)	8 (1)	8 (1)	8 (1)	8 (2)
RAAF (Female)	4	5	3	3
Australian Public Service (Female)	5	6 (2)	5 (1)	7 (2)
Others	22	21	22	22
Total	44	44	42	45

Source: CDSS.

The relationship between CDSS and Deakin University is of some years standing, but less extensive than that of ACSC with ANU or ADFA with UNSW. While CDSS retains control over the curriculum, Deakin awards a Master of Arts (MA) in Strategic Studies without the requirement for significant additional work by those who enrol (in contrast to ACSC). From 65% to 80% of attendees undertake the MA, and about two-thirds merit distinctions or high distinctions.⁴⁵ The university provides one full-time academic to liaise with staff at CDSS and monitor the performance of those course members enrolled in the MA. Negotiations in relation to future academic provision are currently underway.

Key issues

Those selected for the course have already reached senior rank and can be expected to be capable of promotion to star rank (brigadier and above). The pool of potential attendees is thus much smaller than that of ACSC and it may be difficult for the ADF to release some individuals for a year-long course. Most course members possess first degrees and in many cases higher degrees. In recent years, CDSS has been active in negotiating with non-ADF sending organisations in Australia and overseas to ensure that attendees have appropriate academic qualifications and, in the case of civilian attendees, suitable backgrounds.

ADF personnel constitute about 40% of the total course membership on average; of the rest, about 10% are from the Australian Public Service and the remainder are a mix of other Australian civilians and overseas military and civilian personnel drawn from up to 18 different countries. There's some concern that having a majority of civilians and overseas attendees tends to shift the curriculum away from a focus on ADF operations and interests; it also precludes the use of classified material. However, the diversity among course members ensures a wide range of perspectives, not least in relation to issues in Australia's region, from which some overseas members are drawn. It also enhances the centre's role in developing personal contacts between ADF and Australian Public Service members, overseas military officers and others.

The position of 'syndicate directors', who play some part in learning by course members, can be a difficult one. They're dealing with course members who are senior and experienced officers and may struggle to find acceptance if they aren't as well qualified as those they monitor. The selection of directors with the right blend of academic qualifications and practical experience is critical.

There's an argument that the Principal of CDSS should be a senior military officer (or one recently retired) in order to demonstrate

the status of CDSS to course members, especially those from overseas. Wearing a uniform rather than a lounge suit during official visits to or by the centre would also add some prestige. If well-qualified officers can be found, this is a tradition worth reviving.

CDSS conducts extensive evaluation of its course, both during the course (weekly and end of year) and subsequently. A longitudinal survey tracks course members around 12–18 months after graduation and again after three years. Data is gained from graduates and their supervisors about the utility of the course in preparing for work at the strategic level. This is fed back into course development.⁴⁶

It may not be practical to require attendance at CDSS for all ADF officers before promotion to star rank, although that should be the expectation. Some individuals will attend counterpart institutions overseas. Others mightn't be available at the right point in their career but still merit promotion without attending the centre. A comprehensive evaluation of the CDSS course would need to compare its graduates as a group with those who don't attend CDSS—a complex and difficult undertaking.

As required by its top-level guidance and mission statement, CDSS focuses its attention on the national strategic level. However, there are arguments to the effect that high-level PME doesn't adequately cover the conduct of operations, whether war fighting or stabilisation/peacekeeping. A later section considers how this might be remedied.

Centre for Defence Leadership and Ethics

The Centre for Defence Leadership and Ethics is a small but important element of ADC that focuses, as its title suggests, on two of the four qualities that are central to PME. It plays

an innovative role in teaching on leadership and ethical issues not only within ADC but also across the ADF. One of its principal offerings is the Oboe course, a five-day classified program for one- and two-star officers and Band 1 and 2 Senior Executive Service officers of the Australian Public Service. Delivered since 2006, the course covers issues such as contingency planning for operations, support provided by intelligence agencies, working with ministers, strategic communication and key capability issues. By May 2012, over 120 officers had completed the course.⁴⁷

The Centre for Defence Leadership and Ethics contributes to a range of courses throughout the ADF and will engage with some 600 personnel during 2012. It also makes a point of targeting warrant officers as well as commissioned officers. To promote ethical debate and expertise in the wider ADF, the centre has published a series of papers and studies on topics relating to leadership and ethics. It also uses case studies of failures in ethics and leadership—including in the ADF—to good effect.

Capability and Technology Management College

The Capability and Technology Management College runs a year-long program that prepares selected officers to manage capability and technology programs and to lead project teams in Defence. The academic curriculum is presented at master's level and is accompanied by military modules, technical staff studies, relevant short courses and industry visits. Students are expected to read extensively, conduct research, exercise analytical skills and apply military and professional judgement. The college is focused on technology and requires a certain level of education in mathematics and physics for entry.

General issues at ADC

While ADC embraces the full gamut of education and training, the other centres of learning, apart from the five outlined above, have a more practical focus. The ADF Warfare Centre and the ADF Peacekeeping Centre are focused on military operations. The Defence Force Chaplains College and the Defence Force School of Languages prepare individuals in specialised functional areas, while the Defence International Training Centre and Australia's Federation Guard have a training focus.

One challenge for the ADC is thus to maintain a clear distinction between education and training and the very different principles on which each centre of learning is based. There's a natural tendency in military organisations for academic education to drift towards the training end of the spectrum because of a desire to achieve quick and definitive outcomes and to find additional time in overcrowded curricula.

At the same time, the question arises of what other elements of PME should come under ADC. It already has an emerging role in making its 'learning resources available to those not enrolled in [its] formal courses'.⁴⁸ This is particularly important for reservists, given the growing reliance of the ADF on reserve personnel. Part-timers should be encouraged to access PME both on campus and off campus. The changes in train under Plan Suakin in relation to part-time and full-time service should also help to make personnel available for courses at ADC.

Self-directed study raises a number of possibilities for ADC. At present, ADF members who wish to undertake tertiary study at civilian institutions to develop their professional careers can apply for financial support and time off work under the Defence Assisted Study Scheme, which is managed by ADC. The scheme covers 'ADF-preferred'

courses with a career development focus and courses relevant to Defence needs. Contributions towards study costs normally depend on successful completion of a course. In addition, each service runs a 'civil schooling' scheme to encourage external study.

Another form of support is the ADF Higher Education Advanced Standing Scheme, which enables specified education and training provided by Defence to be accepted as 'advanced standing' or 'credit' towards agreed university qualifications at undergraduate and postgraduate levels. The standing given varies from university to university and award to award. Some 29 Australian universities now offer these pathways to higher education.

ADC secures national recognition of courses and qualifications provided by the ADF ('civil accreditation'). While many courses and qualifications take the form of training for specific trades and skills, some can be classed as professional development. This wider recognition of ADF instruction also enhances the standing of the military profession in the community.

The ADC also publishes the *Australian Defence Force Journal*, the aim of which is to promote discussion and understanding of all facets of defence for the profession of arms in Australia. The importance of a professional journal in PME is explored below, and some suggestions for change are offered.

PME outside ADC

Single-service institutions

While the tri-service ADC plays a leading role in PME, single-service organisations remain important. They aren't necessarily focused on delivering PME but include significant elements of it. The issue therefore arises of whether and how such courses should include the preparation of personnel for the ACSC

as an objective. Each service approaches this from a different perspective.

Initial officer training conducted by each service is also relevant to JPME. For those officers commissioned through their own services, ACSC is usually their first substantial tri-service course.

The **Royal Military College, Duntroon** enrolls direct-entry Army officer candidates who take an 18-month precommissioning course and are joined by ADFA graduates at the six-month point. Direct entrants to RMC are usually older than the cadets who enter ADFA. RMC's charter focuses on personal qualities such as 'leadership and integrity', 'high ideals and the pursuit of excellence' and 'a sense of duty, loyalty and service to the nation'.⁴⁹ Its primary role is to produce officers ready to command platoon groups at the rank of lieutenant. A secondary role is to prepare specialist officer candidates for commissions.

The **Royal Australian Naval College** at Jervis Bay conducts a New Entry Officer Course that is designed to teach the knowledge, skills and attitudes needed to be an effective junior naval officer. The focus is on the Navy's core values of honour, honesty, courage, integrity and loyalty; on learning to live in a communal environment; and on qualities of leadership and team membership. About six months long, the course requires students to live at HMAS *Creswell*.

The **RAAF College** at Wagga runs an Initial Officer Course that lasts 17 weeks. It includes training in a variety of skills and disciplines, and is focused on developing qualities such as leadership, commitment and teamwork.

Each service also operates its own 'think tank', which directly and indirectly contributes to PME. All three are designed to raise awareness among uniformed personnel about the history of their individual service, to promote discussion of conceptual and doctrinal issues, and to examine future challenges. Their

presentation of and contributions to courses for the professional development of service personnel, together with the publication of journals, papers and monographs, further raises the sense of military professionalism in the ADF and awareness in the wider community.

- **Sea Power Centre–Australia** was established by the RAN in 1990 as a research centre to foster and encourage the development of maritime strategic thought by injecting intellectual rigour into the public debate on maritime strategy and other maritime issues. The centre, which adopted its current name in 2002, publishes a range of material on maritime issues and has a staff establishment of 16.
- The **Land Warfare Studies Centre** was set up by the Army in 1997 to promote the wider understanding and appreciation of land warfare, to support applied research into the study of land warfare, and to raise the level of professionalism and intellectual debate within the Army. Its principal publications include the *Australian Army Journal* (since 2003), working papers and study papers. Under the command of the Directorate of Army Research and Analysis, the centre has a staff of 14 (four full-time ADF, five part-time ADF, five civilian Defence personnel).
- The **Air Power Development Centre** was created in 1989 'to promote a greater understanding of the proper application of air and space power within the Australian Defence Force and in the wider community'. Its roles include the 'development and revision of indigenous doctrine, the incorporation of that doctrine into all levels of RAAF training, and increasing the level of air and space power awareness across the broadest possible spectrum'. The centre published

32 papers up to September 2011. It has 20 permanent staff (10 military, 10 civilian) plus five non-permanent staff (reservists).

4 Recommendations for change in PME

PME reform is not a pedagogical problem. It's a personnel problem that can be addressed only by changing the military's reward system to favor those with the intellectual right stuff.

—Major General Robert H Scales, US Army (ret'd), 'Too busy to learn', *Proceedings*, US Naval Institute, vol. 136/2/1, February 2010

This section makes recommendations for PME. The recommendations are essentially incremental and recognise that much valuable change is already underway. No major new directions or significant increases in expenditure are proposed. The changes could be implemented over a period of four years or less.

1. A coherent and unified PME system

Australia's PME system has developed in a somewhat ad hoc fashion over the years. In the past, the unifying concept was that officers would learn to lead larger and larger force elements in a progressive or 'stairway' process.⁵⁰ In the contemporary operating environment, a new measure of coherence and unity needs to be created:

- The ADF should develop a clear definition of PME and set out the objectives that PME is intended to achieve.
 - Clear minimum standards should be set for the different levels of JPME:
 - ADFA: undergraduate standard requiring the award of a bachelor's degree by UNSW. This level should lay the foundation for lifelong learning.
 - ACSC: postgraduate coursework standard, leading to the award of postgraduate qualifications for those meeting university standards. This level should develop the capacity to apply logical thinking and analysis to practical issues. The expectation is that those entering ACSC should have a first degree or demonstrate intellectual capacity for postgraduate coursework.
 - CDSS: postgraduate research level, leading to the award of postgraduate qualifications for those meeting university standards. This level should develop students' capacity for original thinking and for discovering original solutions to problems.
- The focus at each level is thus on intellectual performance, not on detailed curriculum content or the span of command.
- Efforts should be made to fill the approximately 10-year gaps between ADFA and ACSC, and between ACSC and CDSS:
 - ADC should engage with the individual services to orient their PME so that it meshes better with courses at ADC.
 - ADC should seek ways of establishing or maintaining contact with graduates of ADFA and ACSC during the gap period, including through encouraging them to undertake self-directed learning.
 - The eventual co-location of all Australian Defence College (ADC) centres of learning is supported as contributing to the creation of a critical mass of teaching staff and a more diverse student body, as well as to economies of scale and more integrated delivery of courses.

2. A flexible system: students and methods

ADC already has a degree of diversity among students, especially at ACSC and CDSS. The presence of civilian and overseas students contributes significantly to the learning process for ADF personnel and also develops valuable informal relationships between course members:

- Further efforts should be made to reach out to members of the ADF Reserve who bring civilian skills and attributes into the ADF.

The experiment of admitting reservists to ADFA should be supported and numbers increased as far as possible. This will contribute in a major way towards stronger ties between full-time and part-time personnel.

- An increase in the number of reservists taking full-time ACSC and CDSS courses should be sought, given the growing reliance on reserve forces by all three services.
- The delivery of courses and modules by distance methods is supported. This will help both full-time and reserve personnel to access JPME. Consideration should be given to opening suitable courses to civilians.

3. A relevant system: operational art

‘Operational art’ refers to expertise in planning, mounting, leading and maintaining major operations, which almost invariably have tri-service, international, whole-of-government and non-government organisation dimensions. The importance of developing this expertise in the ADF was noted some years ago by commentators who argued that Australia’s JPME at the higher levels had neglected operational art

and higher command in favour of strategic policy, and that by remaining focused on the strategic–tactical interface Australia had fallen behind its military peers in the US, Britain and Canada.⁵¹

Large strides have been taken to remedy this deficiency in the past few years. Both ACSC and CDSS now offer substantial components on operational art. However, the presence of international students drawn from up to 18 different countries, while providing many benefits, means that only unclassified material can be used.

A further issue is that the gap is essentially *between* ACSC and CDSS. Australian officers usually undertake command roles on operations at a rank just below that required to attend CDSS, while those deployed after CDSS tend to be working at the national or international strategic level for which the college prepares them.⁵² Ad hoc efforts have been made to fill this gap, but a more stable long-term solution is desirable:

- The ADF should introduce an Operational Warfighting Command Course comparable to the UK’s Higher Command and Staff Course. An annual course lasting around three months might cater for 8–15 ADF officers plus a small number of Defence public servants and representatives from relevant agencies.⁵³ Such a course might be developed in cooperation with Canada and New Zealand and conducted on a rotating basis.

Given the existence of three single-service studies centres, it’s anomalous that no such centre exists for the study of joint warfare operations. Such a centre would focus on keeping up with overseas developments and refinements in campaign planning and operational art and on concept and doctrine development in the joint context. It would perhaps also serve as a think tank for the

Chief of the Defence Force, in the same way that the single-service studies centres support their chiefs.⁵⁴

- The ADF should examine the need for a centre of studies on joint warfare. There would be value in locating it at ADC and in linking it to a resident faculty at ADC (see Recommendation 6).

4. A relevant system: behavioural science

A notable absence from the PME curriculum is the discipline of behavioural science, which embraces sociology, psychology and anthropology. While related to ethics, leadership and management, which are taught in the system, behavioural science seeks to understand the actions of individuals and groups in terms of culture, social norms, religious beliefs, mental processes and so on. Military academies in the US, Canada and elsewhere have long accepted the value of teaching behavioural science in one form or another.⁵⁵ Australia's neglect of this discipline is perhaps due to the assumption that its officers naturally understand such things and have no need of academic instruction. There are two reasons to challenge that view.

First, the nature of many contemporary conflicts means that the military professional must come to grips directly with sources of tension such as culture, religion, clan and tribe. When military personnel are caught up in 'war among the people', one Australian Army officer writes, it's essential that they have some understanding of such issues as 'behavioural norms, the role and accepted treatment of women, tribal and ethnic power bases, economic reliance and historical and existing social conflicts'.⁵⁶ Another former Australian Army officer describes counterinsurgency as in essence 'armed social work'.⁵⁷

To send an officer into a conflict-ridden nation without some ideas and concepts about how different cultures and societies function is to place great faith in innate ability and learning on the job. As a result, one officer writes, 'the Australian army is continuously embarrassed by the superior language skills and cultural awareness of other military forces operating in our neighbourhood'.⁵⁸ The Army's approach to cultural understanding, another observes, has so far been 'largely ad hoc and won on-the-job'.⁵⁹ This sort of casual approach is not adopted with regard to military operations.

Basic cultural awareness training is provided for ADF personnel before overseas operations, but a higher level of behavioural understanding is required on the part of those who must devise tactics and strategies and lead in conflict situations. The effective leader needs a higher level 'cultural competency', an 'ability to adapt to increasingly diverse, remote, and antagonistic cultures and environments'.⁶⁰ This can't be achieved by last-minute briefings on local customs. As then Vice Chief of the Defence Force General David Hurley observed in 2011, the ADF needs to be 'deeply engaged with regional countries and possess an exceptionally strong understanding of their cultures, languages, and ways of thinking'.⁶¹

The second reason to doubt that the ADF can manage without some familiarity with behavioural science lies closer to home. The ADF proclaims that its 'people' are its most important asset and are central to military effectiveness. Yet its 'people problems' have repeatedly created some of the most negative and embarrassing publicity for the ADF. Over the past 20 years or so, there's been a series of sociological and cultural challenges that the defence force hasn't seemed well equipped to handle: the integration of women; sexual harassment and assault; bastardisation and the bullying of subordinates; homosexuals;

ethnic minorities; alcoholism; and the management of suicides. Several incidents in these areas have prompted parliamentary inquiries or ministerial intervention as well as adverse media coverage.

The ADF has struggled ‘manfully’ with these issues, often with real effort and sometimes with moderate success, but those endeavours are rarely enlightened by sociological insight from within. External inquiries are set up and outside experts with sociological expertise are called in. Nowadays, there’s at least a recognition that such expertise is valuable and that culture plays a central role in explaining much of the behaviour—good and bad—found in the ADF. Following the Skype incident at ADFA in 2011, for example, six reviews of the ADF with a distinctly cultural focus were established. The reviews covered topics such as the treatment of women at ADFA and in the wider ADF (by the Sex Discrimination Commissioner, Elizabeth Broderick), the use of alcohol in the ADF, the place of social media in Defence and the personal conduct of ADF personnel. The Defence Committee response to the reviews focused on the need to change major aspects of Defence culture.⁶²

As well as throwing light on military culture in its broadest sense, behavioural science is also relevant to key factors that are intrinsic to the successful management of ADF personnel. Thus Nick Jans argues that military sociology, a subfield of behavioural science:

... focuses on why people behave as they do within military organisations and on the underlying social issues associated with important practical matters, such as military professionalism, the military ethos, recruitment, retention, career development, combat motivation, leadership, family adjustment, military–civilian career transitions, and military–civil/political relationships.⁶³

The study of military sociology as such has been almost totally absent from PME in Australia, although subjects such as personnel management and organisational behaviour have been taught. Those subjects are valuable, but don’t necessarily provide what C Wright Mills called the ‘sociological imagination’—the ability to imagine oneself outside a social system and understand how it works in all its complexity.

Arguments for the inclusion of behavioural science in PME aren’t new. The UNSW–Defence Academic Planning Committee for ADFA prior to 1986 recommended that a Department of Behavioural Science be established within two years of the academy’s opening. Nick Jans supported this proposal, pointing out that it would enhance the ADF’s understanding of the relationship between the armed forces and society, increase its ability to meet demands from subordinates for greater work satisfaction and lead to better management of organisational change. ‘An understanding of organisational behaviour’, he concluded, ‘is fundamental to the profession of arms in the modern world.’⁶⁴

Now, more than ever, there’s a need for a systematic and institutionalised approach to teaching behavioural science across all three services within the framework of PME. The ADF will certainly need to make use of outside expertise, but that’s not a substitute for also having some of that expertise within the ADF. This would enable the ADF to better analyse its own cultural problems and to deal more effectively with personnel problems before they happen.

The experience of Canada in peacekeeping operations in Somalia in 1993 is instructive. Canadian military personnel committed a number of atrocities against the local population, grossly failing to understand Somali society as well as their own internal cultural failings, which should have been

evident for some years. In an effort to restore military professionalism, the Royal Military College of Canada introduced ‘compulsory and significant doses of arts, humanities, and social sciences education for all officer cadets, including those studying science and engineering’.⁶⁵ Australian forces on peacekeeping and similar operations have performed well, but that’s no reason to assume that future disasters will be avoided or that the ADF couldn’t do better with greater expertise in this area.

The following recommendations don’t seek to provide all officers with a high level of sociological expertise. The aim is to develop a degree of ‘sociological imagination’ among a good proportion of officers and to enable a smaller number to specialise in the discipline:

- UNSW@ADFA should introduce a compulsory one-semester course in behavioural science (6 units of credit) as a general education course.
- UNSW@ADFA should introduce a three-year program in behavioural science as an optional specialisation. Courses in ethics and organisational behaviour (already offered by the School of Social Sciences and the School of Business) could be included in the program, since they deal with relevant aspects of human behaviour. The additional staff requirement is estimated at two academics.
- In teaching behavioural science, UNSW@ADFA should make use of service personnel qualified in psychology and qualified civilians in Defence.
- ACSC and CDSS should introduce lectures and/or electives relating to behavioural science in general and military sociology in particular.
- ADC should include a behavioural scientist in its resident faculty.

5. A few good academics (in uniform)

The benefits to military officers of high-level education at research level are significant. They include a rigorous testing of their intellectual powers and a broadening of their understanding of the world. If conducted at a top-class civilian university, such an education will bring officers into contact with future leaders in the civilian community and provide the opportunity to get to know the experts in a given field.

On such grounds General David Petraeus of the US Army has argued that all candidates for higher command positions should attend a top-tier civilian graduate school for a year or two on a full-time basis.⁶⁶ In his view, the study undertaken should be in history or social science (including behavioural science) and be highly demanding. Petraeus further recommends that the period of study should be followed by a teaching assignment at a service academy. Similarly, General Robert Scales proposes that officers who have proved their ability to command at tactical level be given ‘a fully funded two-year hiatus to study military art, behavioral science and alien culture and language at a top-tier civilian graduate school’.⁶⁷

The ADF can’t match the numbers of the US Army, and it has difficulty in releasing personnel for full-time higher studies. Only rarely are outstanding officers sent to leading universities in Australia and overseas for extended periods. Resources should therefore be devoted to increasing the number of ADF personnel with higher postgraduate qualifications. The number of full-time ADF officers with at least a first degree has been steadily rising in recent years. As of mid-2012, the figure was 5,669 officers (about 50% of the total) and 337 other ranks. Of those, many would be capable of undertaking a one- or two-year master’s degree with a significant

component of research. While the ADF already makes some effort in this area, a more explicit policy goal could prove helpful.

As noted above, University College at ADFA has a long-established program for academically qualified Visiting Military Fellows who teach full-length courses alongside their UNSW counterparts. This has benefited students who learn from teachers with practical experience in the services and who can see that academic interests are compatible with being a professional military officer. A higher number of academically well-qualified military personnel should make it easier to find personnel to serve as Visiting Military Fellows at ADFA and also at ACSC and CDSS:

- The ADF should adopt a policy of increasing the number of personnel with higher postgraduate qualifications.
- The ADF should examine ways and means of securing for selected officers a one- or two-year master's degree at a civilian university with a significant component of research. The coursework could include an element of pedagogy.
- The ADF should adopt a policy whereby those with such qualifications can expect to be employed in teaching at ADFA, ACSC or CDSS.

6. An in-house faculty at ADC

PME would benefit from the presence of a small academic faculty based at the ADC. At present, there's a faculty of one, a scholar who contributes to teaching and who's also a productive researcher and publisher of articles and monographs. There are also occasional academic visitors. The addition of two to three more resident scholars, including shorter-term appointments such as for one or two years, would greatly enhance the expertise directly available to ADC for PME at relatively little

cost. The appointment of a behavioural scientist should be a priority.

Such a faculty would have various roles, including contributing to teaching and curriculum development in ADC, providing advice and support to ADC course members, undertaking research on current military issues, publishing through ADC and in academic journals, contributing to single-service PME, assisting with the publication of the *Australian Defence Force Journal*, providing academic advice to Commander ADC, and developing links between ADC and civilian universities.

- ADC should expand its current faculty to three or four scholars. The faculty could include not only civilians but also serving and retired officers with appropriate academic qualifications and skills, including those who have completed a research-level master's degree (see Recommendation 5). The faculty would be distinct from the proposed centre for joint warfare studies, but valuable synergy between the two should be expected.

7. Outsourcing expertise: relations with Australian universities

It's clear that the ADC will continue to rely on Australian universities for most of the subject matter expertise required at ADFA, ACSC and CDSS, even if the number of ADF personnel with suitable qualifications increases and the resident faculty is established. The ADC has already gained much experience in reaching agreements with universities, but its position will be enhanced by the development of a clear ADF policy on PME (see Recommendation 1). Over time, moreover, contracts will come up for renewal, and it's worth developing a long-term strategy.

- ADC should begin to analyse future contracting issues with a view to

developing an appropriate strategy. Relevant questions include whether contracts should be so arranged as to be due for renewal at different times or at the same time, and whether or not it would be desirable for a single provider to win all three contracts.

- ADC should examine whether there are ways of encouraging more universities to enter the market in order to encourage greater competition in tendering (see also Recommendation 8).
- ADC should examine ways of maintaining contact with universities in general, including developing some form of relationship with their peak body, Universities Australia.

8. Promoting the study of defence-related subjects in Australian universities

The teaching of defence-related subjects in universities is highly concentrated in Canberra, as is research in the field. Outside Canberra, courses on international politics, foreign policy, security in general and the like can be found, but not courses on topics such as defence policy, military ethics, operations or military sociology. This means that Australia has few academics who specialise in defence and military issues—and hence a limited field from which to draw subject matter experts and a limited number of universities qualified to tender for PME contracts. Broadening the study of defence-related subjects beyond Canberra could thus be of direct benefit to Defence. In the longer term, there's potential for awakening interest in defence-related issues among universities and a deepening of public interest in and understanding of defence matters.

An outreach program should be developed along the lines of that in Canada, but modified to suit Australian circumstances.

Until recently, the Canadian program supported a very wide range of defence and security studies, many of which weren't directly related to the Canadian armed forces. It's now become more focused.⁶⁸ In Australia there is a case for focusing such a program on military-oriented behavioural science, including military sociology.

There are two reasons for this recommendation. First, these fields are largely underdeveloped in Australia in contrast to comparable overseas countries. Nonetheless, there are university faculties that teach and research sociology, psychology and anthropology, and they could be encouraged to direct their expertise towards military-related topics. Second, behavioural science, as argued above, can help fill important gaps for the ADF in overseas operations and personnel management at home.

The objective of such a program would be to promote teaching and research in the areas of interest and to raise the level of expertise in those areas among academic staff in the tertiary sector. Potential measures include:

- grants to universities outside Canberra for the creation of centres of excellence in military-related studies to support undergraduate and postgraduate teaching, research and publication. Universities close to major ADF centres might be particularly interested in such an opportunity; grants should be on a competitive basis, with universities contributing resources.
- awards (scholarships) to individual students to pursue master's, doctoral and postdoctoral studies in the proposed areas. Such awards could be held at a centre of excellence or elsewhere, if there is relevant expertise in the university concerned; the awards should carry appropriate names, as is the case with

the Sir Arthur Tange Scholarships offered exclusively by SDSC at ANU.

- special grants to individuals or institutions to finance academic research projects, conferences, workshops and other activities considered of value to the ADF
- the award of a visiting professorship for 12 months to an eminent overseas scholar in the field (the holder to spend some time at the ADC and some time at universities outside Canberra).

The sum proposed for this program is \$1.5 million (see Note on Costing below) which would provide for 3 or 4 substantial grants to universities outside the ACT.

In this context, the existence of other cooperative arrangements between Defence and Australian universities can be noted. The ADF Military Law Centre in Sydney was established in 2001 to train ADF legal officers and to contribute to the Asia–Pacific Military Law Centre. The latter is a cooperative partnership between the Military Law Centre and the University of Melbourne Law School that offers military law courses to ADF and regional military officers. In addition, the Australian Centre for Military and Security Law (formerly the Australian Centre for Military Law and Justice) was set up at the ANU in 2008 to promote research into military law and complement the postgraduate teaching of Defence lawyers. Other such cooperative centres deal with veterans' health (University of Queensland) and with defence science (University of South Australia).

- The ADF should examine the feasibility of a program to expand the study of defence-related behavioural science at Australian universities.

While ADC should have carriage of such a program, detailed administration would

need to be at arm's length to ensure that academic freedom is maintained. In Canada, an independent body provides guidance and makes recommendations to the Minister of National Defence. Members are drawn from academia and the defence community, while the chair is selected on the basis of recognised expertise in the field.

9. Beyond the course

The impact of any educational course is intended to last well beyond the course itself and, in the case of military education, well beyond the next posting. However, it's difficult to estimate the true benefits of attendance at ADFA, ACSC or CDSS. The problem is partly that the benefits are intangible, long-term and variable, and partly that no controlled experiment can be run to show what would happen if individuals hadn't attended those institutions.

CDSS conducts extensive evaluation both during and after its course in an exercise that's made easier by its smaller numbers. There's scope for more evaluation of courses at ACSC and at ADFA:

- ADC should develop a consistent methodology for evaluating all of the courses for which it is responsible.
- Each service should compare the retention and promotion rates of officers who have entered via ADFA against officers who have entered by other paths.
- ADC should engage with the Centre for Military Education Outreach at King's College London as one means of measuring itself against international standards.

The objectives of the Centre for Military Education Outreach include the 'exchange of best practice in the delivery of Professional Military Education'. It also

has a focus on providing advice on PME to less developed countries—an activity in which ADC may seek to become involved in the future.

The long-term influence of courses on those who have attended them depends in part, first, on the maintenance of the informal links between individuals developed during the course and, second, on the existence of a continuing contact through an alumni association. An effective alumni association will make it easier to maintain links and keep alumni abreast of developments at the ADC.

The importance of developing an online community for alumni has been recognised by ADC, as has the difficult problem of catering for graduates from its diverse range of learning centres.

- ADC should give high priority to developing alumni groups. Membership may be more valued by individuals if there's a subscription cost attached, including the option of a one-off subscription for life membership.
- Membership of an alumni group should entitle members to a printed journal, perhaps at a reduced annual fee (see Recommendation 10).

10. Professional identity and public perceptions

Most professions have a journal that serves as a focal point for their members and as a flagship for their profession. The ADC publishes the *Australian Defence Force Journal*, which contains items of interest for military personnel but appears to have little public appeal. Readership among the interested general public is important, since wider circulation will raise the status of the profession and demonstrate to the community that serious analysis of weighty issues does take place within the ADF. This isn't always evident at present.

The *Australian Defence Force Journal* also appears to be relatively uncritical in content and doesn't foster vigorous professional debate. A true profession demonstrates its willingness to engage in serious discussion of ideas.⁶⁹ In the US, the National Defense University publishes the flagship *Joint Force Quarterly* for the Chairman Joint Chiefs of Staff. The *Joint Force Quarterly* welcomes scholarly, independent research from all quarters in the US and overseas and enjoys a wide readership among civilians as well as military personnel. The *Canadian Military Journal* was created along similar lines in 2000 as part of efforts to revive professionalism in Canada's armed forces. In Australia the official magazine of the Australian War memorial *Wartime* provides a good example of attractive presentation and substantial content.

- The ADF should develop the *Australian Defence Force Journal* into a flagship journal for the profession of arms in Australia.

Key features of a new model professional journal (to be published in print and online) should include:

- encouragement of ADF personnel to contribute articles of high quality, including editorial assistance to improve argument and presentation
- invitations to leading Australian and overseas experts on defence and security to contribute on topical issues
- informed and measured critical analysis, which shouldn't merely be accepted but welcomed
- quarterly publication, so that readers are frequently presented with new ideas while each edition is not unduly lengthy
- relatively short articles (for example, 3,000 words maximum)

- illustrations and photographs
- book reviews, debates, correspondence and similar components
- an independent editorial board with freedom to publish scholarly articles on controversial topics.

The journal should be distributed to members of alumni organisations and should include a section devoted to alumni matters.

11. Management of ADC

The learning centres within ADC are very diverse, running the gamut from high-level strategic analysis at CDSS to the ceremonial functions of Australia's Federation Guard.

Against this background, it's important that training and education be kept distinct conceptually and organisationally:

- The appointment of a Deputy Commander ADC to take responsibility for the training element of ADC should be considered. This is also important because of the lean staffing structure of ADC.
- The post of Commander ADC should be for three years to provide the necessary continuity. In any educational institution, change and development take time; sustained effort from the top is essential to achieve desired goals.

Concluding remarks

[T]he more you cut force structure, the more vital your professional military education system becomes.

—Bill Taylor (ed), *Professional military education: an asset for peace and progress*, Center for Strategic and International Studies, Washington DC, March 1997, pp. 19–20

The ADF is by nature a 'doing organisation': it exists to carry out important national tasks.

It needs a mass of equipment to perform those tasks, but it depends critically on the intellect, expertise, ethical character and leadership qualities of its people. Securing these factors is the primary purpose of PME. The challenge for the ADF, as for any military force, is to avoid undue attention to doing and owning while giving proper weight to learning and thinking.

This paper points to several areas where initiatives might be taken or existing developments continued: developing a coherent policy on PME; embracing diversity in students and means of delivery; a greater focus on operational art; expanding behavioural science in the curriculum; producing more academics in uniform; creating an academic faculty at ADC; managing relations with universities; promoting military-related expertise across Australian universities; ensuring the lasting influence of courses; and the publication of a flagship professional journal.

The most important factor in developing PME, however, will be the culture of the ADF itself. Will it value conceptual thinking about the profession? Will it encourage individual personnel to achieve academically, rather than simply ensuring that those attending courses are given university qualifications? Will it give greater weight to intellectual quality in promotion and selection for command? Will it post well-qualified personnel to appointments that make the best use of their expertise? Will it develop programs and publications that underpin such a philosophy?

To some extent, these things are already happening and are to be welcomed. There's already a shift in thinking away from the traditional view of PME as something that must take the form of institutions performing specific roles for a specific group of officers. The approach now is to see a range of assets, located primarily within ADC, that can be used flexibly to provide PME to groups and

individuals as required. The institutional perspective won't disappear entirely as long as residential courses remain (as they should), but even those courses can be managed flexibly.

The US is prone to use legislation to reform PME. The Goldwater–Nichols Act of 1986, for example, required officers to undertake JPME at two levels, while promotion to admiral or general was to require service in at least one joint appointment. Only recently, US Army General Robert Scales advocated 'the legislative hammer ... to drive the services to reward intellectual merit'.⁷⁰ Congress has also directed the services to use more civilian academic staff in PME, although the main response has been to engage retired military people.⁷¹

In Australia, PME can progress without such legislative help. The ADC would require a modest budget increase and a number of additional staff to take on the full range of additional activities outlined here. It should be given primary responsibility for the development of a culture in the ADF that embraces learning and its associated values which are essential to any healthy and vigorous profession.

Note on costing

While the recommendations outlined here will incur some additional costs, on close inspection the additional cost burden doesn't appear to be heavy.

First, the budget of the ADC is already set to rise from \$80 million per year to about \$400 million per year by the end of 2012.⁷² Some of the proposed expenditure increases are likely to already be included in forward estimates.

A small proportion of the proposed expenditure might not fall within the ADC budget but, assuming that it does, the sum estimated (\$4 million) amounts to only 1% of ADC's annual expenditure.

The growth of the ADC is predicated on the realisation of savings through a better and more efficient alignment of single-service and joint education and training and through better procurement of education and training on the part of Defence Learning Branch. The savings are expected to be far greater than the sum proposed in this report.

Second, some of the recommendations are largely cost free (such as defining PME, setting appropriate standards, engaging with

Table 7: Approximate annual costs of proposals

Measure	Cost
Centre of Studies on Joint Warfare (3 staff) ^a	\$500,000
Expansion of behavioural science at ADFA (2 staff) ^a	\$350,000
ADC in-house faculty (2 additional staff) ^a	\$350,000
Military-related behavioural science at universities ^b	\$1,500,000
Professional journal ^c	\$300,000
Alumni support	\$200,000
ADC Deputy Commander	\$300,000
Joint Warfighting Course	\$500,000
Total	\$4,000,000

a The proposed staff numbers are set at an absolute minimum.

b Based on the cost of the Canadian program.

c Some income may be earned from sales.

other institutions and developing evaluation criteria). These will require staff time, which can be found by an adjustment of priorities.

Third, some recommendations (such as sending more ADF officers to study at civilian universities and releasing them for teaching at PME institutions) may be more difficult to implement. However, the likely slowdown in operational tempo over the next three or four years should ease the staffing situation. In addition, the introduction of Plan Suakin should provide greater flexibility in releasing officers for extended periods.

Where staff numbers are proposed to be increased—as in the case of a centre for joint warfare studies—it may be possible to reallocate personnel from existing organisations. To expand behavioural science at University College, ADFA, some reallocation of the teaching staff might be negotiated.

The more substantial recommendations can be costed in annual terms (including overheads) very approximately as shown in Table 7.

Notes

- 1 There is no formal ADF definition of 'professional military education'. The definition here draws on Clausewitz's analysis of military genius as a combination of mind (intellect, expertise) and character (ethos, leadership).
- 2 Sanu Kainikara, *Professional mastery and air power education*, paper no. 33, Air Power Development Centre, Canberra, August 2011, pp. 21–2.
- 3 Cathy Downes, *Special trust and confidence: the making of an officer*, Frank Cass, London, 1991, p. 2.
- 4 On the importance of personnel factors to capability, see Nick Jans and David Schmidtchen, *The real C-cubed: culture, careers and climate and how they affect capability*, Australian National University, Canberra, 2002.
- 5 General Sir Rupert Smith, *The utility of force*, Allen Lane, London, 2005.
- 6 Mark Thomson, *Serving Australia*, Australian Strategic Policy Institute, Canberra, 2011, p. 3.
- 7 See Warrant Officer Michael Craig, 'War of the people: counterinsurgency education for non-commissioned officers', *Australian Army Journal*, V(3), Summer 2008.
- 8 Mark Thomson, *The cost of defence*, Australian Strategic Policy Institute, Canberra, 2012.
- 9 Parliament of Australia, *Officer education: the military after next*, report of the Defence Sub-Committee, Joint Standing Committee on Foreign Affairs, Defence and Trade, Australian Government Publishing Service, 1995.
- 10 A similar argument is made by Thomas Ricks for the abolition of the US Naval, Army and Air Force Academies on the grounds that they are costly, unrepresentative and elitist, while encouraging closed minds and failing to produce better officers than those who attend reserve training at universities; 'Why we should get rid of West Point', *Washington Post*, 10 April 2009.
- 11 Graeme Cheeseman, Robert A Hall, *Preparing for the 'military after next': the Price report and a 'new model' Australian Defence Force Academy*, Australian Defence Studies Centre, Canberra, 1997, p. 43

- 12 Jeffrey Grey, 'Professional military education and the ADF', *Defender*, 21(3), Spring 2004.
- 13 David Schmidtchen, 'Following the white rabbit of professional military education', unpublished paper, 2006.
- 14 Michael Evans, 'The closing of the Australian military mind: the ADF and operational art', *Security Challenges*, 4(2), Winter 2008, p. 129.
- 15 Jim Molan, 'Debate: the ADF and operational art', *Security Challenges*, 4(2), Winter 2008, p. 134.
- 16 On the establishment of the Australian College of Defence and Strategic Studies, see David Cox, Andrew O'Neil, 'Professional military education in Australia: has it all gone terribly right?', *Australian Defence Force Journal*, 171, 2006.
- 17 Lieutenant General David Hurley, General Sir John Hackett Memorial Lecture, Kings College, London, 11 November 2010, p. 9, available from: http://www.defence.gov.au/adcs/docs/cdf_conf2010/CDFConf_101201_SirHackettMemorialLecture.pdf
- 18 Michael Evans, *From the long peace to the long war: armed conflict and military education and training in the 21st century*, occasional paper no. 1, Australian Defence College, 2007, pp. 16–17.
- 19 Cited in Thomas Brusolino, 'Navel gazing Google deep: The expertise gap in the academic–military relationship', in Douglas Higbee (ed), *Military culture and education*, Ashgate, Burlington, Vermont, 2010, p. 146.
- 20 David J Bercuson, 'Up from the ashes: the re-professionalization of the Canadian Forces after the Somalia affair', *Canadian Military Journal*, 9(3), 2000.
- 21 Robert H Scales, 'Too busy to learn?', *US Naval Institute Proceedings*, February 2010.
- 22 Vice Admiral Ann Rondeau, 'Identity in the profession of arms', *Joint Force Quarterly*, 62, July 2011.
- 23 James T Currie, 'Senior officer professional military education as an equalizer', *Joint Force Quarterly*, 59, 2010; Andrew Davies, Hugh Smith, *Stepping up: part-time forces and ADF capability*, Australian Strategic Policy Institute, Canberra, November 2008.
- 24 Keith D Dickson, 'A strategic asset for engagement: enhancing the role of the National Defense University', *Joint Force Quarterly*, 52, January 2009.
- 25 Hugh Smith, *Undergraduate and postgraduate education in the ARA Officer Corps*, working paper no. 10, Australian Defence Studies Centre, Canberra, 1993.
- 26 Michael Evans, pers. comm., 21 June 2012.
- 27 Howard Wiarda, *Military brass versus civilian academics at the National War College: clash of cultures*, Lexington Books, Lanham, Maryland, 2011, pp. 70–75.
- 28 Edward F Palm, 'Real officers don't teach Keats: the Naval Academy, ROTC, and military spiritualism', in Douglas Higbee (ed), *Military culture and education*, Ashgate, Burlington, Vermont, 2010, p. 17.
- 29 Wiarda, 2011, ch. 2; Joan Johnson-Freese, 'The reform of military education: twenty-five years on', *Orbis*, 2012, pp. 142–4.
- 30 Charles D. Allen, 'Redress of Professional Military Education: The Clarion Call', *Joint Force Quarterly*, 59, 2010.
- 31 The Canadian forces now take formal education into account as 'a major factor in career advancement and command appointment'; Bercuson, 2009, p. 37.

- 32 Daniel Hughes, 'Professors in the colonels' world,' in Douglas Higbee (ed), *Military culture and education*, Ashgate, Burlington, Vermont, 2010, p. 154.
- 33 Molan, 2008, pp. 133–134.
- 34 <http://www.defence.gov.au/adf>
- 35 Major General Craig Orme, foreword, *Transforming defence education and training*, DPS-DECo09-11, Canberra, 2011.
- 36 Major General Craig Orme, foreword, *Planning guidance: transforming defence education and training*, DPS-MAY019-12, Canberra, July 2012.
- 37 Rear Admiral James Goldrick, 'Thoughts on joint professional military education', *Australian Defence Force Journal*, 181, 2010, p. 8.
- 38 Hugh Smith, 'Educating the guardians: the politics of the Australian Defence Force Academy', *Politics*, 19(1), May 1984.
- 39 Elizabeth Broderick, *Report on the Review into the Treatment of Women at the Australian Defence Force Academy*, Australian Human Rights Commission, Sydney, 2011; Defence Committee, *Pathway to change: evolving defence culture. A strategy for cultural change and reinforcement*, Department of Defence, Canberra, 2012.
- 40 Hugh Smith, *Officer education and the 'military after next': A response to the Price report*, working paper no. 33, Australian Defence Studies Centre, Canberra, 1995.
- 41 Defence Committee, *Pathway to change: evolving defence culture. A strategy for cultural change and reinforcement*, Department of Defence, Canberra, 2012, Recommendation 13. Defence also agreed to Recommendation 12 to give the Commandant a stronger hand in selecting outstanding staff, particularly in ensuring appropriate representation of females.
- 42 *CDSS Handbook 2012*, p. 2. For a valuable benchmarking of CDSS against comparable institutions in Canada, the UK and the US, see Geoff Peterson, *Nurturing the Australian military mind: a considered assessment of senior professional military education*, Shedden Papers, Australian Defence College, March 2012.
- 43 <http://www.defence.gov.au/adf>
- 44 Ray Funnell, 'Debate: the ADF and operational art', *Security Challenges*, 4(2), Winter 2008, pp. 138–139.
- 45 Geoff Peterson, pers. comm., 6 March 2012.
- 46 Geoff Peterson, pers. comm., 24 July 2012.
- 47 Jamie Cullens, Director, Centre for Defence Leadership and Ethics, pers. comm., 3 July 2012.
- 48 Major General Craig Orme, foreword, *Transforming defence education and training*, DPS-DECo09-11, Canberra, 2011.
- 49 RMC, http://www.army.gov.au/Who-we-are/Divisions-and-Brigades/Forces-Command/Royal_Military_College_of_Australia/RMC-D
- 50 Michael Evans, *From the long peace to the long war: armed conflict and military education and training in the 21st century*, occasional paper no. 1, Australian Defence College, 2007, p. 16.
- 51 See, for example, Michael Evans, 2008, p. 129.
- 52 Peterson, 2012, p. 25.
- 53 Peterson, 2012, p. 25.

- 54 See Evans, 2008, p. 130; Aaron P Jackson, 'It's time for an ADF joint warfare studies centre', *Australian Defence Force Journal*, 181, 2010, pp. 41–49.
- 55 For a review of teaching in nine overseas countries, see 'Sociology at military academies around the globe', *Armed Forces & Society*, 35(1), special edition, October 2008. There's no article on Australia.
- 56 Michael Lehmann, 'Military operations in the 21st century: a cultural cringe?', *Australian Army Journal*, 5(3), Summer 2008.
- 57 David Kilcullen, 'Twenty-eight articles: fundamentals of company-level counterinsurgency', *Military Review*, May–June 2006, pp. 103–108.
- 58 Major Cate Carter, 'Cause for engagement: examining the case for foreign area officers in Army', *Australian Army Journal*, 8(2), Winter 2011.
- 59 Lehmann, 2008, pp. 22–23.
- 60 Russell D Howard, *Educating Special Forces junior leaders for a complex security environment*, report 09-6, Joint Special Operations University, Hurlburt Field, Florida, 2009, pp. 13–14.
- 61 Hurley, Hackett Memorial Lecture, 2011.
- 62 Defence Committee, *Pathway to change: evolving defence culture. A strategy for cultural change and reinforcement*, Department of Defence, Canberra, 2012.
- 63 Nick Jans, 'The sorry state of military sociology in Australia', *Australian Defence Force Journal*, 175, January–February 2008.
- 64 Nick Jans, 'Academy cadets should be taught behavioural science', *Australian Defence Force Journal*, 59, July–August 1986, pp. 46–47.
- 65 Bercuson, 2009, p. 37.
- 66 Petraeus, 2007.
- 67 Scales, 2010.
- 68 For information on Canada's Security and Defence Forum, see <http://www.forces.gc.ca/admpol/SDF-eng.html>
- 69 On the need for vigorous professional debate in the ADF, see Lt-Col. Jim Bryant, 'Are we a thinking Army?', *Australian Army Journal*, 3(2), Winter 2006.
- 70 Scales, 2010.
- 71 Edward F Palm, 'Real officers don't teach Keats: the Naval Academy, ROTC, and military spiritualism', in Douglas Higbee (ed), *Military culture and education*, Ashgate, Burlington, Vermont, 2010, p. 11.
- 72 Major General Craig Orme, foreword, *Transforming defence education and training*, DPS-DECo09-11, Canberra, 2011.

Appendix A: Professional military education in the US

PME in the United States is currently under debate. The following document was issued by the Chairman of the Joint Chiefs of Staff on 16 July 2012.

Joint Education

White Paper

16 July 2012

'I am convinced that learning and leadership are at the core of our profession. Military service must continue to be our Nation's pre-eminent leadership experience. We will continue to reform and leverage the Professional Military Education enterprise to advance our profession. It is more important than ever to get the most from the potential and performance of every Service member.'

Martin E. Dempsey
General, US Army

Chairman of the Joints Chiefs of Staff

Introduction

As we reflect on the conduct of Joint operations since the passage of the Goldwater-Nichols Defense Reorganization Act of 1986, the lessons of the last decade of war, and on the future it is clear that joint education is essential to the development of our military capabilities. Today's Joint Force is a highly experienced, battle-tested body of men and women, with a decade of practical, focused warfighting knowledge. Our colleges and schools have not had so many seasoned combat leaders in their classrooms for at least two decades. Our education efforts provide a force multiplier in our effort to develop and advance the shared values, standards, and attributes that define our Profession of Arms.¹ However, much is changing in the security

environment as well as the experiences of our leaders that will challenge us to deliver high quality Joint education as never before. The explosion of information technologies that provides global and regional actors nearly instant access to information means that the United States no longer enjoys clear operational and technological advantages in the competition to "observe, orient, decide and act"² more effectively than adversaries. We must learn and properly place in context the key lessons of the last decade of war and in doing so, we will prepare our leaders for what is ahead - not just what is behind us. This is why we must review our joint education objectives and institutions to ensure that we are developing agile and adaptive leaders with the requisite values, strategic vision and critical thinking skills necessary to keep pace with the changing strategic environment. If we get this right, and get it right now, we will excel well beyond 2020.

The Value Proposition

Our military has traditionally relied on education in times of uncertainty to develop understanding of the future security environment, lead adaptation and ensure readiness to face future, unknown challenges. During the years between World War I and the outbreak of World War II, when we also faced change and resource challenges, strategic thinking at the Service Colleges laid the foundations for innovative capability development that proved essential for victory in both the European and Pacific theaters.³ We are at a similar warfare inflection point; one that eclipses the introduction of nuclear weapons, the introduction of the air domain and the airplane, and the transition from battleship to aircraft carrier. Warfare is changing in all domains, and we have also added new domains. The introduction of the cyber domain, for example, may be an even

greater change than those of the past as it eludes national control, political boundaries, legal authorities, and attribution. We are in an era where we cannot even define “militarily” much more beyond the status of those in uniform. More importantly, we are in an era of austerity where budget cuts and economic uncertainties will impose serious challenges on how we allocate resources. Our ability to define and inculcate our value proposition across the Joint enterprise will be critical in achieving the proper balance between competing operational and joint education requirements.

Education Outcomes

Ensuring relevancy in our delivery of Joint education requires us to fundamentally understand the experiences and perspectives of our students and the changes that have occurred in 25-plus years of post Goldwater-Nichols joint education, joint operations, and joint experience. The enduring purpose of Professional Military Education (PME) is to develop leaders by conveying a broad body of professional knowledge and developing the habits of mind essential to our profession. Our joint education institutions will continue to be measured in part by the performance of leaders serving in areas where critical thinking skills are essential. Beyond providing critical thinking skills, our education programs must also ensure that our leaders have:

- the ability to understand the security environment and the contributions of all elements of national power;
- the ability to deal with surprise and uncertainty;
- the ability to anticipate and recognize change and lead transitions; and
- the ability to operate on intent through trust, empowerment, and understanding.

Other attributes for leader development will evolve and will need to be aligned with future operations envisioned by *Capstone Concept for Joint Operations 2020* and incorporated into our curriculums to ensure that gaps are identified and eliminated.

Our maturing understanding of the requirement to conduct operations at the speed of the anticipated security environment across multiple domains reinforces the need to expand the practice of mission command throughout the force. To fully realize the potential of mission command, our joint education efforts must effectively instill the cognitive capability to understand, receive, and clearly express intent, to take decisive initiative within intent, accept prudent risk, and build trust within the force.⁴

Intent

The last decade has further demonstrated that our enlisted force requires education and not “just training”. Recognizing that officers and enlisted personnel have different functions, responsibilities, authorities and levels of organizational accountability, Joint Force 2020 must develop the talents and abilities of leaders at every echelon to maximize their individual potential, build effective units, and to optimize their contribution to the joint fight.

We must assist every service member in becoming a life-long learner, always hungry for new knowledge and deeper understanding. Learning opportunities must occur in every aspect of service and should not be restricted to episodic attendance in formal schools. Every member of the force should seek to be a scholar of the Profession of Arms in their own right and a teacher to those coming along behind. Time in the duty day set aside for individual learning, balanced with unit duties, is a clear commitment to the imperative for life-long learning.

The quality of professors and teachers has been and will remain an enduring and essential component in our institutional commitment to joint education. Simply put, we need the right folks teaching. The best and brightest minds in our rising generation should be shaped by the best and brightest minds from both our military and civilian institutions. Within the military, instructor duty should be seen both by individuals and by the organization as an essential element of a successful career. We should also continue to recruit the best and brightest from civilian academia and the interagency to expand our educational expertise.

The members of our profession have been raised in an interconnected “e-savvy” world where the sharing of information is automatic and nearly instantaneous. This generation absorbs and diffuses information rapidly and in different ways than preceding ones. Coupled with their high levels of operational experience is the desire to actively participate in their own education as life-long learners. Collaborative, context-based problem-solving events will have great appeal and consequently greater effect in achieving educational outcomes. Joint educational approaches must adapt to stay relevant to how students learn best, while balancing “tried and true methods” with new techniques.

As we continue to develop our future leaders, I expressly desire that joint education:

- Lead the way in the renewal of our commitment to the Profession of Arms with leadership as its foundation;
- Prepare the leaders of Joint Force 2020 to be adaptive, innovative, critical thinking leaders capable of operating in complex and unstructured environments;
- Provide the foundation for leaders to be able to understand the security environment, change, and transitions;
- Provide the foundation to design and execute campaigns at the operational level in pursuit of strategic objectives;
- Establish and sustain mission command throughout the force;
- Enable jointness through the integration of diverse service cultures and approaches;
- Maintain our competitive learning advantage through:
 - Mastery of fundamentals of the art and science of war;
 - Intellectual curiosity, coupled with openness to new ideas;
 - Operational adaptability (to include critical thinking, prudent risk acceptance and rapid adjustment fueled by continuous assessment) – fundamentally, the ability to deal with the unexpected by making sound choices based on measured risk;
 - The ability to properly balance the art of command with the science of control, to include the ability to create trust relationships with seniors, subordinates and partners;
 - Skills in negotiations, culture and language;
 - An understanding of intelligence - both its capabilities and limitations;
 - The ability to process information into knowledge, then share that knowledge, and act on it.
- Attract and maintain civilian and military faculty members who are among the very best and brightest of their contemporaries.

- Expand access and opportunity to populations outside of conventional classrooms, pursuing legislative authorities as needed.

Endstate

The desired endstate of the review is to define and achieve the specified and implied education tasks needed to lead and support the development of Joint Force 2020. This is our opportunity to harness the power of joint education to develop leaders who can meet the challenges of an uncertain, complex, and increasingly competitive and dangerous world. We must, and will, seize it.

Notes

- 1 See my White Paper, 'America's Military – A profession of arms', (Available at www.jcs.mil).
- 2 Boyd's 'OODA' loop.
- 3 Examples include the Rainbow plans at the Naval and Army War Colleges; the 'Industrial Web' theory, created at the Air Corps Tactical School, that was the blueprint for World War II air campaigns; and the creation of the Tentative Landing Operations Manual by the faculty and students of Marine Corps schools in 1933 of the Tentative Landing Operations Manual, that came to fruition in the amphibious operations in the Pacific theatre.
- 4 See my White Paper, 'Mission Command,' (3 April 2012) (Available at www.jcs.mil).

Appendix B: Professional military education in the UK

The Defence Academy of the United Kingdom was established in 2002 as the body responsible for the higher education of British armed forces personnel. From a single budget, it provides a range of courses for officers at all levels but, unlike ADC in Australia, doesn't embrace precommissioning courses, which are run by each service. Its principal components are as follows.

Royal College of Defence Studies

Dating back to 1922 and located in London, the Royal College of Defence Studies provides a 10-month course for brigadiers and colonels (or equivalents) who have the option of taking an MA with King's College London. Civilians and overseas personnel constitute about two-thirds of the 90-member course. The college is headed by a three-star with a two-star directing staff from each service. Its mission is:

To prepare senior officers and officials of the United Kingdom and other countries and future leaders from the private and public sectors for high responsibilities in their respective organisations, by developing their analytical powers, knowledge of defence and international security, and strategic vision.

In practice, the emphasis is very much on strategic thinking rather than military practice or force capability. The workload is kept light to maximise time for thought and reflection.¹

Joint Services Command and Staff College

Formed in 1998 from a merger of the single-service staff colleges and the Joint Service Defence College (similar to the Joint Services Staff College in Australia), the Joint Services Command and Staff College

moved to purpose-built accommodation at Shrivenham in 2000. The college provides a range of courses, as set out below.

Higher Command and Staff Course

This is a 14-week course for about 30 UK one-stars and colonels (or equivalent), civilian equivalents and personnel from NATO countries. The course focuses on high command and on operational art in the context of joint and multinational operations. It seeks to equip its students to be operational leaders.

Advanced Command and Staff Course

This is a 46-week course for about 330 personnel, particularly officers at the major and lieutenant colonel levels. It prepares officers for higher positions in the planning, conduct and command of operations. Instruction is provided by military staff and by academics employed by King's College London, which accredits the course as an MA in Defence Studies under an ongoing agreement.

The course was shaped by a comprehensive Defence Training Review in 2001, which aimed to make education and training 'more aligned to operational and business needs'.² Recognising that most officers were university graduates, the review concluded that study should be at postgraduate level and should include essential topics such as military operations, international studies, strategy and security policy; command, leadership and management; defence business management, acquisition and logistics; and defence-related areas of science, technology and engineering. The Defence Training Review also took into account the high level of operational experience (around 80%) and combat experience (around 40%) among students, as well as the fact that the average

age of course members had risen from about 36 to 40 years.

A key driver of change in the syllabus was the broadening of the spectrum of military missions to include activities such as peacekeeping and humanitarian operations as well as war fighting. Officers would be more likely than ever to be working with civilian authorities and non-government organisations and in a multinational environment. Broad intellectual and analytical skills would be required, together with qualities of temperament such as flexibility, the ability to make difficult decisions and the capacity to cope with uncertainty and change.

A review of the Advanced Command and Staff Course in 2003–04 agreed that there would be a four-week preparatory course to ensure common entry levels; that there would be a common syllabus, without modules for specific groups of students; that the course would prepare students for all higher positions, not simply colonel equivalent; and that the course would have both pass and fail grades. Overall, the aim is on acquiring skills such as problem-solving, research, creativity and continuous learning, rather than simply knowledge and information. Consequently, students were given more time for private study and research (up from 27% to 38%, and consolidated into larger blocks).

Junior/Initial/Intermediate Command and Staff Training Courses

These are for officers aged between 26 and 34 and include an eight-week maritime course for Navy senior lieutenants and junior lieutenant commanders, a 32-week land course for Army majors on promotion, and an eight-week air course for squadron leaders. As well as providing single-service instruction to equip students for command and staff appointments at the next level, the courses

also help prepare officers for selection to the Advanced Command and Staff Course.

There are also courses for warrant officers and for reservists, as well as an individual studies course based on distance learning for new Royal Air Force officers.

College of Management and Technology

Based at Shrivenham, the College of Management and Technology provides postgraduate level courses in leadership, management, technology and engineering as well as languages. Since 1984, the chief academic provider has been Cranfield University, which now has a contract that runs to 2027.

The Defence Academy also had an Advanced Research and Assessment Group (under various names) that had evolved from the Soviet Studies Research Centre in the Cold War era. Consisting of subject matter experts in various fields of security, it published research on strategic issues, contributed to 'red teams' in war games and administered civilian and reserve skills databases, among other tasks. When it was closed down on financial grounds in 2010, its functions were taken over by a private consultancy, the Conflict Research Studies Centre.

Notes

- 1 Geoff Peterson, *Nurturing the Australian military mind: a considered assessment of senior professional military education*, Shedden Papers, Australian Defence College, March 2012, pp. 7 and 10
- 2 Kate Utting, 'Beyond Joint: professional military education for the 21st century', *Australian Defence Force Journal*, 181 (2010), p. 63. This and the following two paragraphs are also based on this article.

Acronyms and abbreviations

ACSC	Australian Command and Staff College
ADC	Australian Defence College
ADF	Australian Defence Force
ADFA	Australian Defence Force Academy
ANU	Australian National University
CDF	Chief of the Defence Force
CDSS	Centre for Defence and Strategic Studies
JPME	joint professional military education
MA	master of arts
NCO	non-commissioned officer
PME	professional military education
RAAF	Royal Australian Air Force
RAN	Royal Australian Navy
RMC	Royal Military College
SDSC	Strategic and Defence Studies Centre
UNSW	University of New South Wales

Acknowledgements

The authors are grateful to all those serving and retired ADF officers, Defence officials and academics who shared their expertise and insights on professional military education.

The authors also wish to thank Dr Ros Richardson, Research Associate at ASPI, for her invaluable assistance in this project.

About the authors

Hugh Smith is an Honorary Visiting Fellow at University College, ADFA, having taught at RMC Duntroon from 1971 to 1986 and at ADFA from 1986 to 2004. While at ADFA he was the founding director of the Australian Defence Studies Centre and introduced postgraduate courses on legal and moral problems of international violence and on armed forces and society. He has been a frequent lecturer at Australian staff colleges since 1976. Dr Smith is the author of *On Clausewitz: a study of military and political ideas* (Palgrave Macmillan, 2005) and the co-author of *Stepping up: part-time forces and ADF capability* (ASPI, November 2008).

Anthony Bergin is the Deputy Director at ASPI. He taught for five years on the staff of the Royal Australian Naval College and for 20 years lectured in political science and defence studies at University College, ADFA. For 12 years he served as Director of the Australian Defence Studies Centre. He also served for five years on the academic advisory board of the Joint Services Staff College.

Important disclaimer

This publication is designed to provide accurate and authoritative information in relation to the subject matter covered. It is provided with the understanding that the publisher is not engaged in rendering any form of professional or other advice or services. No person should rely on the contents of this publication without first obtaining advice from a qualified professional person.

About Special Reports

Generally written by ASPI experts, Special Reports are intended to deepen understanding on critical questions facing key strategic decision-makers and, where appropriate, provide policy recommendations. In some instances, material of a more technical nature may appear in this series, where it adds to the understanding of the issue at hand. Special Reports reflect the personal views of the author(s), and do not in any way express or reflect the views of the Australian Government or represent the formal position of ASPI on any particular issue.

ASPI

Tel +61 2 6270 5100

Fax + 61 2 6273 9566

Email enquiries@aspi.org.au

Web www.aspi.org.au

© The Australian Strategic Policy Institute Limited 2012

This publication is subject to copyright. Except as permitted under the *Copyright Act 1968*, no part of it may in any form or by any means (electronic, mechanical, microcopying, photocopying, recording or otherwise) be reproduced, stored in a retrieval system or transmitted without prior written permission. Enquiries should be addressed to the publishers.

Notwithstanding the above, Educational Institutions (including Schools, Independent Colleges, Universities, and TAFEs) are granted permission to make copies of copyrighted works strictly for educational purposes without explicit permission from ASPI and free of charge.