

The Vanguard Occasional Paper Series

No. 3 December 2023



Vincible Ignorance

Reforming Australian Professional Military Education for the Demands of the Twenty-First Century

> Professor Michael Evans General Sir Francis Hassett Chair of Military Studies



About the Series

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Abbreviations

ACSC	Australian Command and Staff Course	DSR	National Defence: Defence Strategic Review
ADC	Australian Defence College	DSSC	Defence and Strategic Studies Course
ADF	Australian Defence Force	JPME	joint professional military education
ADFA	Australian Defence Force Academy	JWET	joint warfighter education and training
ASPI	Australian Strategic Policy Institute	PAFC	profession of arms foundational courses
CDSS	Centre for Defence and Strategic Studies	PMC	private military companies
CJTF	Commander Joint Task Force Course	PME	professional military education
COMADC	Commander, Australian Defence College	POA	profession of arms

Author's Preface

We cannot solve our problems with the same thinking we used when we

created them. Albert Einstein

One of the most interesting aspects of the Australian Defence Force (ADF) is that many senior officers know what they dislike about professional military education (PME). Yet. when asked how they would go about improving and reforming the system, a dozen different answers follow, many of which are impractical or simply confuse training with education. This is not surprising since most military professionals are not educators and seek expertise from those who are.

Some years ago, a distinguished former Chief of Joint Operations informed me that he considered most graduates of the Australian Command and Staff College to be 'academic essay writers rather than military planners'. When I asked him what he wanted prioritised in the PME syllabus, he replied, 'You tell me, you're the military educator, you're the expert.' This reply was foremost in my mind when writing this *Vanguard* occasional paper, which I hope will serve to explain what has gone wrong in Australian PME over the last two decades and what must be done to repair it in strategic circumstances that no longer afford the ADF the luxury of time.

There are a number of people who have been supportive of this study in one way or another. I would like to especially thank two former outstanding Commanders of the Australian Defence College (COMADC) Major General Mick Ryan, AM, Rtd (COMADC 2018–21) and Air Vice Marshal Stephen Edgeley, AM, PhD (COMADC 2021–23) for their encouragement and personal drive in trying to come to grips with the challenges of PME reform. I benefited from many other officers with a strong interest in military education during my association with the Australian Defence College. They include Major General Stephen Day, AM, DSC, Rtd; Major General Chris Field, AM, DSC, CSC, Rtd; the late Rear Admiral James Goldrick, AM, CSC, Rtd; Major General Andrew Hocking, CSC, Rtd; the late Major General Jim Molan, AO, DSC, Rtd; and Major General Roger Noble AO, DSC, CSC, Rtd.

I would also like to acknowledge the contributions made by officers and officials involved with my short course program of PME for practitioners (the Apollo, Strategos and Advanced Military Studies courses), which have long been a laboratory for deep discussions on military education. I am grateful to Colonel Ross Boyd, AM, Rtd, Colonel Lara Troy, Colonel Graeme Sligo, Rtd; Wing Commander Deborah Phillips; Group Captain Mark McCallum, Rtd; Colonel Richard Barrett, Lieutenant Colonel Kate Tollenaar; Commander Susan Harris, RAN, Ms Kim Muir, Dr Cathy Moloney, Associate Professor Ahmed S. Hashim and Dr Ross Babbage, AM for their views and insights. In the United States, I am grateful for insights from Dr Thomas G. Mahnken, Dr Thomas-Durrell Young, Dr Frank Hoffman, Dr T. X. Hammes and Dr Hal Winton. I am also indebted to the expert editorial advice received from Ms Fiona Mackrell of the Centre for Defence Research. Of course, none of the individuals mentioned are responsible for the content of, and views expressed, in this paper, which belong to the author.

Professor Michael Evans General Sir Francis Chair of Military Studies Deakin University | Australian Defence College Canberra

13 November 2023

Executive Summary

This study examines the state of Australian professional military education (PME) as we approach the mid-2020s. The paper traces the development of PME over the past two decades and concludes that the present system is deeply flawed and will not meet the professional needs of the Australian Defence Force (ADF) into the 2030s. Despite reviews and reports between 2000 and 2013 highlighting a critical need for PME reform, little has been done to remediate the system. There is a lack of institutional understanding of the relationship between the health of the Australian profession of arms and the strength of the education system that underpins military activity. This lack of understanding incurs risk, since it is occurring at a time when the very concept of professionalism is being challenged by new forms of occupational expertise unleashed by the digital revolution.

At the heart of the ADF's weakness in PME is an overreliance on a two-tier twentieth-century philosophy of education and training based on large residential, but episodic courses, that remain disconnected from the requirements of careerlong learning. Evidence of educational weakness is most strikingly revealed by the emergence of two '10-year gaps' in professional knowledge over the past quarter of a century. The ADF's outmoded two-tier philosophy of education and training needs to be replaced by a new three-tier system that introduces the connective tissue of professional foundation studies to improve future educational and training requirements. A three-tier learning system of academic education, professional foundation studies and military training needs to be developed. This three-tier approach should be embedded in an 'end to end' career-long PME continuum that exploits digital technology and blended educational methods to serve professional development in the joint force.

The study concludes by suggesting a series of reforms and recommendations that, if enacted, may assist the ADF in its quest to become 'fully fit for purpose' into the 2030s and beyond.

Introduction

In 2023, the *National Defence: Defence Strategic Review* (DSR) declared the ADF to be 'not fully fit for purpose' to meet the demands of the most dangerous strategic environment since the Second World War.¹ Such a frank statement reflects not only the ADF's operational and materiel shortcomings, but also, by extension, weaknesses in its system of military education. If wars are first prepared for in the minds of an officer corps, then, a 'not fully fit for purpose' defence force is one that is failing in the intellectual preparation of its personnel for the ultimate military challenge: the test of arms.

This study focuses on explaining the decline of the ADF's professional military education (PME) system in the twentyfirst century and how critical gaps in professional knowledge have been allowed to develop over the past twenty years. It is important to emphasise that this study does not focus on the beginning and end of the PME continuum – that is on cadet education at the Australian Defence Force Academy (ADFA) or on educational initiatives for star-ranked officers. Rather, the concentration here is on the period between commissioning and colonel-equivalent rank where important gaps have emerged in professional knowledge.

The study is divided into four parts. The first part examines the system of Australian military education as it has evolved between 2000 and 2023. Through the medium of a literature analysis, this study identifies an array of institutional weaknesses in Australian military education and demonstrates that they are of long-standing and revolve around the ADF's unwillingness, or inability, to take ownership of its core professional knowledge. Attempts at PME reform, have been dogged by a combination of official indifference, outsourcing to civilian providers, lack of Defence educational expertise, and constant resource constraints. The result is that in 2023 the ADF confronts a sub-optimal PME system marked by large gaps in professional knowledge contributing to a joint force that is unready to meet the strategic and operational challenges of the mid-2020s and beyond.

The second part of the study concentrates on establishing a context in which PME might be reformed to strengthen the Australian profession of arms. Unlike previous reviews of Australian military education, this essay firmly situates the need for educational reform with the requirement for professional expertise rather than the logic of academic attainment. In pursuit of greater professional military capability, the study examines the dual impact of the 'general crisis of the professions' and 'the death of expertise' on Western liberal democracies in the digital age. An understanding of how digital technology and post-modern social forces have combined to erode the standing of the major professions in post-modern democratic societies illuminates the educational challenge that faces the Australian profession of arms in the twenty-first century.

The third part of the study argues that the ADF is not immune from the post-modern crisis of the professions and notions of post-professional 'security expertise'. The joint force must confront twenty-first century challenges to its status by reinforcing the modern relevance of military professionalism. This does not mean a retreat into monastic isolation or shrinking away from unwelcome post-modern forces. On the contrary, for the ADF, it is a task that calls for moral stewardship combined with a clear grasp of the contemporary forces of change. The Australian joint force must reaffirm and uphold its social role as both morally valid and professionally unique to a post-modern society. Essential in this process of reaffirmation will be a need for the ADF to accept that its professional status will increasingly rely on a reformed PME system. If the ADF wishes to enhance its organisational health in the years ahead, then, it must not dilute or separate the organic linkage between military professionalism and military education.

With the history of Australian PME, a survey of changing notions of expertise, and the importance of education to military professionalism established, the study moves on to the challenge of Australian PME reform.

The fourth and final part of the study argues that there must be an end to viewing the Australian PME as a process based on large, but episodic, industrial-age twentieth-century residential courses. Such a view is now outmoded and only contributes to unacceptable knowledge gaps in the joint force. Instead, Australian PME must become a *gestalt*, (an organised whole greater than the sum of its parts), a system of continuous and career-long learning that is aligned flexibly to twenty-first century conditions. To accomplish this objective, the ADF needs to change its philosophy of education from a dual layered approach between military training and academic education. Australian PME must

be viewed as a system composed of three layers of linked learning: academic education (provided by scholars), professional foundation studies (provided by scholars and military specialists), and military training (provided by military experts). Currently, there is a glaring absence of emphasis in Australian PME in the middle layer of PME in the form of professional foundation studies. This is a major institutional weakness in the ADF since professional studies function as connective tissue between the layers of academic education and military training. Many of the institutional weaknesses in the Australian profession of arms can be traced to the vacuum that exists in professional foundation studiers.

Accordingly, this study recommends a form of educational shock therapy by proposing the introduction of 'just-intime' blended and short (remote-residential) Profession of Arms Foundation Courses (PAFC) into the joint professional military education continuum. PAFC courses need to be situated at vital career junctures between commissioning at ADFA and attendance at the Australian Command and Staff College (ACSC). Designed correctly, short, blended PME courses represent an innovative means of performance enhancement for the ADF. As the Australian profession of arms moves into the mid-2020s, a system of blended short joint PME courses needs to be introduced and linked to other necessary changes in the curricula of larger residential courses. The overall aim of such reforms must be to ensure that, in educational requirements at least, the joint force becomes 'fit for purpose' to meet the security challenges of the 2030s and beyond.

Part I

Reviews, Critiques and Reforms: The Australian Profession of Arms and PME, 2000–2023

A general survey of Australian PME since the turn of the century reveals an ADF with weaknesses in its conception of the profession of arms. Many of these weaknesses can be traced to a military education system that is less the product of professional analysis than of the *zeitgeist* of the 1990s. In the decade following the end of the Cold War, the ideology of neoliberalism and market economics in Australian politics led to a boom in the outsourcing of government services to the private sector, the rationale being it would deliver higher efficiency and cost-effectiveness. The Defence Department was no exception to this trend and embraced a Commercial Support Programme, especially in areas such as logistics, administrative management and educational services.²

In the military education context, deregulation and privatisation led to outsourcing and partnering with an array of civilian universities, most of which had little understanding of the educational requirements of the profession of arms. Although this approach was often justified by the Department of Defence on grounds of cultivating an academic expertise that was absent in the military profession, it was also a monetary savings device. Outsourcing to the civilian tertiary education sector removed many of the major overheads the ADF would have faced if it had decided to develop a form of in-house military profession. Yet at the same time, external contracting undermined the distinctiveness of the Australian military profession. Outsourcing to civilian providers had the effect of reducing the internal supply of personnel, which, in the words of one observer, left the ADF 'lean, mean and vulnerable.'³

A survey of military education reviews and critiques over the last two decades is instructive, in that it reflects the dominance of an outsourcing philosophy behind Australian PME. Much of the process began under the Howard Government's 1997 *Defence Efficiency Review* (DER) and *Defence Reform Plan*. These schemes expected to save up to \$55 million per year by centralising ADF education delivery and facilities.⁴ Between 1999 and 2001, the ADF's Joint Education and Training (JET) directorate created a joint Australian Command and Staff College (ACSC) by integrating the single service staff colleges.⁵ Simultaneously, the Defence Staff Course and the Australian College of Defence and Strategic Studies were merged into a single Defence and Strategic Studies Course (DSSC) housed within a new Centre for Defence and Strategic Studies (CDSS). From January 2001, both of the new educational organisations, the ACSC and the CDSS alongside the Australian Defence Force Academy (ADFA) came under a new two-star command, the Australian Defence College (ADC) at Weston Creek, in Canberra.

The 2000 Zimmer-McKern Review of Postgraduate Military Education

In August 2000, as part of its centralisation of military education, the Department of Defence commissioned an independent review of the ADF's postgraduate educational requirements. The review was led by two Queensland business studies scholars: Professor Ian Zimmer, Executive Dean of the Faculty of Business, Economics and Law, University of Queensland and Professor Bruce McKern, President and Chief Executive of the Mount Eliza Business School.⁶ The Zimmer-McKern Review was charged not only with determining the appropriateness of military postgraduate education but also with establishing whether Defence was receiving 'value for money'. Yet, a close reading of its findings reveals it was mainly concerned with the efficacy of outsourcing between Defence and civilian tertiary institutions, including the University of Canberra (for the new ACSC), Melbourne University Private Ltd, La Trobe University and the University of New South Wales (for the new CDSS).

The authors' concerns were with educational context rather than content. They admitted that they did not conduct any assessment of the content of the proposed syllabit to be delivered by the ADC to establish whether the subject matter

was 'designed-to-purpose'.⁷ Furthermore, their examination of comparative American and British models of military postgraduate education was superficial and prone to error. The authors concluded overseas allied models were simply too large for Australia to emulate because the US and UK armed services 'operate[d] their own universities'. Instead, an ADC-tertiary sector partnership was a 'sensible approach' and would save a further \$10.5 million per annum.⁸ The report stated:

Defence should determine its requirements and develop an outsourcing policy for the delivery of postgraduate education to facilitate a more coordinated and cost-effective approach towards the civilian tertiary market. The number of educational providers used by Defence should be rationalised to benefit from economies of scale in procurement.⁹

Despite its concentration on outsourcing and economies-of-scale the Zimmer-McKern Review did reveal the existence of a policy vacuum in Australian military education that prevented analysis of the long-term needs of the ADF. 'There is,' commented the review, 'no strategic policy or philosophy on the skill sets or educational requirements the ADF may need to meet its strategic objectives'.¹⁰ Much of Australian military education beyond cadet education at ADFA was *ad hoc* and lacked an overall rationale. The review wondered how the ADF proposed to grow strategic thinkers without a targeted education policy. The authors asked rhetorically: 'Is there any priority for MBAs or M Def Studies or M Info Mgmt [sic] or any other qualification?'¹¹

The Zimmer-McKern Review went on to warn of the danger of credentialism in the ADC–university partnership. The authors emphasised that an academic qualification was a 'byproduct of a military necessity' and not an end in itself. The review noted that the University of Canberra had been content to 'badge' the Army Command and Staff Course during the 1990s. As a result, 'the Master of Defence Studies so gained was of questionable value and appeared to be a case of "credentialism" for its own sake'.¹² The ADF, the review warned, needed to ensure that its educational system was rigorous enough to give Australia 'a competitive intellectual edge'.¹³ The review further noted the ADF's weakness in developing internal educational specialisation for its core knowledge. The authors stated that it was impossible for the ADF to deliver a Command and Staff Course or a Defence and Strategic Studies Course on its own because 'Defence does not have sufficient military staff of the academic calibre to sustain postgraduate education in its own right.'¹⁴

The review wondered how the ADF proposed to grow strategic thinkers without a targeted education policy. The authors asked rhetorically: 'Is there any priority for MBAs or M Def Studies or M Info Mgmt [sic] or any other qualification?' The review accepted that 'the unique nature of the profession of arms requires an acknowledgement that specialised programs are not readily obtainable from civilian tertiary providers'.¹⁵ In particular, it noted an ADF concern that the operational level of war was being 'poorly addressed' in military education, at a time when Headquarters Australian Theatre was being formed and required expert staff.¹⁶ Owing to the small size of the ADF, the review rejected submissions calling for the creation of an Australian Joint School of Advanced Military Studies to address the study of the operational art and other specialist military areas as intellectual endeavours.¹⁷ Instead, Zimmer and McKern sought to resolve the problem of a lack of military educational expertise in the new ADC by recommending that the ADF use the single Service studies centres as educational as well as research organisations. The review team suggested collocation of the single Service 'think tanks' in proximity to the new joint college to provide 'valuable educational support to the ADC'. This was a sensitive proposal since the three centres came under the direct control of their respective Service chiefs. The review suggested that the Service chiefs retain command of their research and analysis centres,

but that each centre would in future be linked to the ADC to enhance professional education and 'encourage the development of research skills in the body corporate of the ADF'.¹⁸

Given the institutional weaknesses in Australian military education detected by the Zimmer-McKern Review, it is not surprising that the authors concluded that a growing relationship with the civilian tertiary sector was 'actually a positive for the ADF in the provision of postgraduate education'.¹⁹ The authors recommended greater educational coordination with the university sector with Defence outsourcing its post-ADFA educational requirements as much as possible, leaving 'only military-unique topics' to be delivered by Defence. Such an educational policy would also result in significant savings in operating costs for Defence.²⁰

The conclusions reached in Zimmer-McKern Review provided the outsourcing roadmap and financial savings formula for Defence educational policy into the twenty-first century. Yet its main weakness was that its authors were business scholars with no experience in the field of PME – which in 2000 was hardly appreciated as a distinct area of expertise in Australia – and still less an understanding of the armed services. This inexperience was highlighted by the review's proposal to compensate for the lack of military education expertise in the ADF by collocating the Service think tanks at the ADC to serve as an *ersatz* joint military faculty. The recommendation was flatly rejected by the Service chiefs who judged it to be an ill-considered attempt at 'short-cut jointery' that threatened their independence.²¹ Thus, the ADC began its life in 2001 with a military education system heavily weighted towards outsourced academic education and barely angled at all towards professional educational expertise for 'military-unique topics'. These topics would rely largely on instruction by an eclectic and rotating cadre of directing staff officers, many of whom were unfamiliar with the field of PME and lacked expertise as educators.

Over the next decade and a half, Defence's lack of a strategic framework for education, the paucity of internal expertise and the consequent heavy reliance on outsourcing caused much critique and comment on the relationship between military professionalism and the status of military education. Critics included scholars such as Professor Jeffrey Grey, Associate Professors Hugh Smith and Anthony Bergin, Dr Nick Jans and the author of this paper. Senior military officers such as Major General Craig Orme, Air Vice Marshal Margaret Staib, Lieutenant General David Hurley, Major General Paul Symon and Duncan Lewis, a former Secretary of Defence and retired Army major general, also made stringent observations on the efficacy of military education.

The 2004 Grey and Smith Critiques and the 2007 Evans Study

In 2004, a leading military educator, Professor Jeffrey Grey at the Australian Defence Force Academy at the University of New South Wales penned a short but scathing critique of Australian PME.²² Grey had spent the period 2000-2002 as the Matthew C. Horner Chair of Military Theory at the United States Marine Corps University in Quantico and was well-versed in contemporary trends in professional military education. On his return to Australia, Grey was dismayed by the state of Australian military education. He wrote:

Midway through the first decade of the 21st century, the officer PME system in Australia is in profound disarray and is fundamentally failing the organisation [the ADF] of which it should be the intellectual gatekeeper and guiding beacon.²³

Grey identified a series of weaknesses in the Australian PME system. The most serious of these were the lack of a professional educational continuum and the outsourcing of PME content and delivery of curricula to universities. In an echo of the Zimmer-McKern Review, Grey condemned Defence's failure to create 'a comprehensive, sophisticated and relevant system of professional military education (PME), or even to articulate a coherent statement of policy.¹²⁴ There was no continuum of education or philosophical alignment between different career stages. In Grey's view, a lack of expertise within the profession of its own education goals had led to 'the mad drive' to outsource PME to Australian universities.²⁵ For Grey, outsourcing without any prior Defence philosophy of military education amounted to little more than a form of 'crude credentialism'. Australian universities, he warned, lacked both research expertise and academic teaching qualifications in war studies to develop a suitable professional curriculum and course content.²⁶

Given this situation, the Australian military's outsourcing to the universities was, as Grey memorably wrote, akin 'to the churches hand[ing] the training of clergy to McDonalds'. He went on to criticise what he viewed as a predominance of business-style managerialism over warfighting and strategy in both the ACSC and the DSSC course offerings. Why, he queried was an MA degree from a university with no military faculty elevated in status at the expense of 'the venerable post-nominal 'psc' [passed staff course]?' He deplored the institutional weakness created by the lack of a cadre of ADF officers with higher research degrees who could contribute to military education, either as professional generalists or as staff specialists – suggesting that the Australian military suffered from 'a fundamental problem of professional

Given this situation, the Australian military's outsourcing to the universities was, as Grey memorably wrote, akin 'to the churches hand[ing] the training of clergy to McDonalds'. self-confidence regarding the more intellectual aspects of the profession of arms'.²⁷ He called for the ADF to take back ownership and responsibility for its professional education through the creation of an Australian Defence University. Grey concluded his critique by noting that that Australia 'remains one of the few technologically advanced Western defence forces that consistently undervalues intellectual attainment among its wider officer corps and its leadership'.²⁸

Grey was not alone in his concerns about the health of Australian PME. In the same year, 2004, founding Director of the Australian Defence Studies Centre at ADFA and the country's most prominent military sociologist, Hugh Smith produced an important essay on the gathering crisis enveloping Australian PME.²⁹ Smith pointed to the obvious weakness of outsourcing to universities, namely that 'defence studies' were hardly the focus of the civilian tertiary sector. The vast majority of Australian universities did not offer courses in strategic studies, military history, military sociology

or war studies. Given this paradox, Smith highlighted the twin dangers of outsourced university badging creating a form of 'credentialism' and the ADF's own temptation towards pursuing 'the trap of vocationalism' in a quest for relevance.³⁰ He argued that the need was for the military and the universities to forge a careful understanding of the blending of professional and academic requirements for military education. In this partnership, it was imperative for the profession of arms to ensure that it 'owned' its core knowledge. Smith wrote:

There is a body of essential knowledge and expertise relating to the deployment of violence which is unique to the profession of arms though much differs as between land, air and maritime warfare. But military professionals, not universities or other outside institutions, teach this knowledge. Academic learning is necessary – not as part of professional knowledge – but because it provides understanding of the context in which armed force is used or threatened.³¹

The body of essential knowledge on the art and science of war needed to be taught in a timely and up-to-date manner by military educators with requisite qualifications. This meant that the profession of arms needed to constantly scan the horizon for evidence of continuity and change in military affairs. In this sense, the military was 'not a 'learned profession' but a 'learning profession', since war itself was chameleon-like in character.³²

In 2007, the author's own study, *From the Long Peace to the Long War: Armed Conflict and Military Education and Training in the 21st Century*, made a further case for a philosophical and organisational transition in Australian PME to meet twenty-first century needs.³³ Like Grey and Smith, it called for a stronger continuum of professional learning in the military profession but emphasised the need for an educational approach that reflected rapid changes in contemporary warfare. These changes were identified as merging modes of war across a globalised electronic battlespace; the challenges facing Western strategy from dealing with the joint, interagency and multinational environment that characterised contemporary conflicts; and the rise of broader-based 'whole-of-government' national security strategies. The study advocated the fostering of an education system capable of producing officers with the right balance of

To achieve such a transition, the paper recommended a shift away from overreliance on a static model of industrial-age episodic residential education toward a model of 'continuous learning' that exploited information-age technology in a blended and flexible system of remote and residential learning. The traditional 'stairway' of long joint residential courses of PME needed to be supplemented with shorter 'glide path' and 'runway' models of specialised blended courses designed to plug intellectual gaps that were beginning to emerge across the whole-of-career continuum in military learning.³⁵ The study noted:

Increasingly, armed forces institutions must [make] a critical transition from a philosophy of phased, episodic education to the philosophy of a continuous 'learning organisation' – one that emphasises strategic knowledge and operational training and conserves its human resources. Such a program is less a program than a philosophical state of mind involving continuous, career-long education for excellence.³⁶

The Evans study, *From the Long Peace to the Long War*, also sought to promote a stronger capability connection between education (how to think) and training (what to do). The study viewed education and training not as polar opposites but as complementary, if different, activities. Influenced by the work of John Masland and Laurence Radway, the study argued that training and education needed to be seen as a composite learning system. They were dichotomies on a military spectrum of professional expertise that ultimately converged and interlocked – like 'Siamese twins' – to reinforce each other in a synergy of theory and practice.³⁷

The 2011 Orme Review and the 2012 Peterson Report

The work of Grey, Smith and Evans appeared to have little influence on the subsequent direction of official Australian PME and its later manifestation as joint professional military education (JPME). Indeed, in 2010, a special edition of the *Australian Defence Force Journal* devoted to joint PME focused mainly on officer education at ADFA and did not cite the work of the three scholars.³⁸ However between 2011 and 2012, three Defence reviews echoed some of the observations of Grey and Evans and were more critical of officialdom in their tone.

In August 2011, the Commander of the Australian Defence College (COMADC), Major General Craig Orme authored Bevond Compliance: Professionalism. Trust and Capability The Evans study, *From the Long Peace to the Long War*, also sought to promote a stronger capability connection between education (how to think) and training (what to do).

in the Australian Profession of Arms, an official examination of Australian military culture.³⁹ Although the report was focused mainly on behavioural issues, it made reference to the important role of education in creating a 'learning culture' inside the profession of arms.⁴⁰ Orme pointed out that there were 'important gaps' in the ADF's understanding of the profession of arms, some of which he clearly traced to growing shortcomings in PME. He noted:

It is not surprising that the nuances of 'professionalism' as applied to the profession of arms are not deeply understood, at least in explicit terms, across the Australian military profession. The topic is treated at a merely introductory level in important career courses such as the Australian Command and Staff College.⁴¹

Orme went on to call for a stronger institutional approach that reflected an 'operations-focused culture' in which the nuances and complexities of military professionalism in the twenty-first century were firmly embedded in military education. He advised:

In Australia's case, we need to understand the profession of arms from an ADF perspective, with the ADF being the institutional manifestation of the profession. This would require, at the least, appropriate treatment in Professional Military Education for mid-level officers and senior sailors/SNCO [senior non-commissioned officers] across the Services.⁴²

Orme noted that Australia lacked an intellectual focus on military professionalism. To remedy this deficiency, he suggested that there was a need for 'an expert central agency' inside the ADC to promote both education in, and further studies of, organisational behaviour, military sociology, military-related anthropology and civil-military relations. The ADF would benefit, he suggested, from sponsoring academic positions in sociology to develop and support the proper study of these areas in Australian military education.⁴³

Orme's report was followed by an internal assessment of senior PME at the ADC. The assessment was written by the Director of Curriculum Development, Geoff Peterson in March 2012 and was entitled, *Nourishing the Australian Military Mind: A Considered Assessment of Senior Professional Military Education.*⁴⁴ The report compared the educational preparation of senior officers at the CDSS with their counterparts in the United States, the United Kingdom and Canada. Peterson concluded cautiously that the DSSC approach was 'appropriate for Australia's current circumstances.⁴⁵ Despite this positive finding, the report was not uncritical of the CDSS. Peterson stated that the four-country comparison with peer militaries had exposed 'compromises and vulnerabilities' and other weaknesses at the ADC. These 'compromises and vulnerabilities' included challenges in learning methodology, educational resourcing and warfighting preparation across the Australian military education system – as well as weak interagency participation and insufficient staff development – for educational purposes.⁴⁶

In terms of learning methodology, the report admitted that the Australian PME system placed too much emphasis on passive, as opposed to active, learning and was generalist rather than specialist in ethos. A more passive learning environment was due to an overreliance on academic outsourcing and the absence of in-house expert faculty to facilitate warfighting-relevant discussion.⁴⁷

Peterson highlighted the value of the 'hybrid' Canadian PME model in which ten in-house academics (employed as public servants) were integrated with Canadian Forces' directing staff to provide 'a very effective balance of Defence control of design and appropriate academic coverage of the curriculum'.⁴⁶ He went on to admit that while contemporary PME practice suggested it was best to 'own and control the curriculum design and to have a specialist internal faculty for curriculum delivery', the DSSC – and the ADC more broadly – could not perform this role, as it was the least resourced college of the four countries.⁴⁹

Without resources for an internal model, the ADC had little choice but to pursue a 'second best option' in the form of an academic-defence partnership using considerable outside expertise. 'This approach,' observed Peterson, 'comes with a higher degree of risk than other methods. It presumes access to academic and government presenters without paying the overheads associated with a permanent faculty staff.¹⁵⁰ He noted that an absence of dedicated Defence education policy contributed to knowledge 'gaps' in the Australian PME continuum that needed to be closed in the development of officers and civilian defence personnel. In particular, an outsourcing approach contributed to the most critical gap existing within the DSSC: the lack of warfighting preparation. Peterson warned:

There is currently no course in the professional military education continuum that specifically prepares likely officers for warfighting command at the operational level. This is a critical military capability vulnerability and a large reputational risk.⁵¹

The 2012 Australian Strategic Policy Institute Inquiry into Military Education and the 2013 Jans Study on Strategic Leadership

Although the CDSS Peterson Report was an internal survey undertaken by ADC staff, it was honest and frank about the weaknesses and knowledge gaps in Australian PME and seems to have contributed to the belated creation of a Defence Learning Branch under the ADC to examine education and training needs.

In August 2012, Peterson's report was followed by a much stronger critique in the form of an external inquiry into Australian military education undertaken by the Australian Strategic Policy Institute (ASPI). The inquiry was led by two leading scholars, Associate Professors Hugh Smith and Anthony Bergin both formerly employed by the University of New South Wales at ADFA. Both scholars had extensive experience of PME. Smith, a world-class authority on Carl von Clausewitz, was Australia's leading PME expert at the time; Bergin was deputy director of ASPI, had taught at the Royal Australian Naval College and served on the board of the Australian Joint Services Staff College in the 1990s. The special report written by the two scholars, entitled *Educating for the Profession of Arms in Australia*, was of great value in that it synthesised many of the findings of earlier critiques, confirmed their essential accuracy and, above all, made a series of reform recommendations.⁵³

Like the Zimmer-McKern Report of 2000, the Smith-Bergin Report found a continuing Defence policy vacuum on military education. The authors declared that no formal Defence definition of PME existed, and they discovered no clear educational objectives to guide the ADF. As a result, Smith and Bergin followed their own definition derived from the work of Clausewitz:

Professional military education is the process of developing four essential qualities that are required by members of the profession of arms: intellect, expertise, ethos and leadership.⁵⁴

The two scholars emphasised the role of PME as an 'essential contribution to Australia's military capability' and warned that treating the subject as a low priority was short-sighted given the ADF's critical need for adaptable and professional personnel.⁵⁵ They emphasised the importance of drawing a distinction between training and education and warned against the ADF's tendency to conflate the two areas of endeavour.⁵⁶

The ASPI Inquiry echoed the Peterson Report by highlighting the existence of inadequate warfighting preparation in the education continuum. Like Peterson, the ASPI reviewers recommended the introduction of a three-months-long Operational Warfighting Command Course on the British model. As a complement to this course, they suggested that the ADF would benefit from the creation of a 'centre for the study of joint warfare' to identify the latest trends in campaign planning, operational art and doctrine development.⁵⁷ Like earlier critiques, the inquiry again highlighted the emergence of large gaps in the continuum of JPME. In particular, the ASPI authors identified the existence of 'two 10-year gaps' between ADFA and ACSC and again between ACSC and DSSC respectively. Both gaps led to serious deficiencies in institutional knowledge and exacerbated weaknesses in the Australian profession of arms.⁵⁸

Alongside the specific gap in PME that existed between ADFA and the ACSC, the ASPI inquiry considered the 'lack of a common entry point' to be a flaw at the command and staff level. Like the Zimmer-McKern Review before it, the Smith-Bergin Inquiry pointed out that the course pedagogy had to be anchored to baseline knowledge because of the diverse composition and backgrounds of the staff college student body. ADF officers attending the Command and Staff College are selected by parent Services, while civilians are chosen by the public service hierarchy. Hence, the ACSC neither selects nor imposes academic entry requirements on its students, making it impossible to correlate the standard of the course. The inquiry noted that while some students needed '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'. The ASPI authors called

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for a rationalisation of the entry standard through the introduction of a preparatory short course to ensure collective understanding from the outset by ACSC attendees.⁵⁹

ASPI's inquiry made six principal recommendations to improve PME outcomes for Defence. First, like earlier critiques of Australian military education, they urged the creation of 'a coherent and unified PME system' based on a clear definition of purpose and with clear minimum standards set at different educational levels. They noted that Australia's ad hoc system of PME had prevented a continuum of learning and that 'efforts should be made to fill the approximately two 10-year gaps between ADFA and ACSC and between ACSC and CDSS'.⁶⁰ Second, to enhance the status and prestige of the DSSC senior course, the authors recommended the appointment of a suitable serving or (retired senior officer) rather than a civilian public servant as Principal of the CDSS.⁶¹ Third, given the astonishing statistic that between 1999 and 2012 the average COMADC tenure had been little over a year, the ASPI Inquiry called for the creation of a deputy commander position to achieve more consistent command effectiveness.⁶² Fourth, echoing Orme, they urged a stronger educational focus in Australian military education on the operational art and the behavioural sciences of sociology, psychology and anthropology in PME. Fifth, they urged the formation of a small in-house faculty of three to four specialised Defence scholars with research degrees to teach at ACSC and CDSS and ensure the curricula was kept up to date and applied. Finally, the review called for the replacement of the moribund and low-quality *Australian Defence Force Journal* (ADFJ) with a high quality, quarterly 'flagship journal' modelled on the American *Joint Force Quarterly* or the *Canadian Military Journal* to engage in serious debate of military affairs.⁶³

While some of the above changes had been recommended by earlier critiques of PME, what was novel about ASPI's 2012 *Educating for the Profession of Arms in Australia* was a focus on the cost of reforms. The inquiry included details of financial estimates to demonstrate that the extra funding for changes was far from onerous or impractical. Indeed, the costs of ASPI's proposals for educational reform were estimated by the inquiry team at a modest \$4 million, or one per cent of the annual ADC budget of \$400 million.⁶⁴

The last of the important reviews between 2000 and 2013 with relevance for PME was a 2013 internal team study by the Centre for Defence Leadership and Ethics (CDLE) at the ADC. Although the CDLE study was on strategic leadership, it proved valuable in revealing the intimate connection between professional development and military education. Led by military sociologist, Nick Jans, the CDLE team study entitled *The Chiefs: A Study of Strategic Leadership* contained several critical observations on the processes of Australian PME.⁶⁵

Like Grey and Orme before him, Jans identified educational weakness as a major challenge in the ADF's understanding of the concept of military professionalism. Indeed, the Jans team believed that the concepts of a military profession and military professionalism received 'comparatively cursory treatment' in educational courses and, in consequence, were not properly understood by the Australian military institution.⁶⁶ Like Smith and Bergin of ASPI, Jans and his team noted the existence of various PME 'gaps' leading up to the strategic level. The publication quoted the Vice Chief of the Defence Force (VCDF), Lieutenant General David Hurley (later Chief of the Defence Force), to the effect that there were 'worrying' aspects of military career development connected to the Australian military profession's 'lack of a strong intellectual underpinning'.⁶⁷ The VCDF admitted there existed:

major but subtle flaws with our professional military education [where] we go through the steps in terms of training/career development, but we don't provide continuing education in this field, at least except for a select few.⁶⁸

Similarly, the Deputy Chief of the Army, Major General Paul Symon lamented the ADF's tactical orientation and 'lack of strategic talent', which he linked to educational deficiencies. As he put it, 'we [in the ADF] have a lot of work to do in PME in terms of strengthening our strategic thinking capability'.⁶⁹

Throughout *The Chiefs*, Jans and his team pondered the need for a more modern and flexible joint PME system. He quoted Air Vice Marshal Margaret Staib's view that ADF education was far 'too rigid' and had too much 'programmed material', which created disadvantages for female officer advancement. Staib pointed out that a reliance on passing through large episodic education 'gates' meant that many service women missed out in professional development for

family reasons.⁷⁰ Retired major general and then Secretary of Defence, Duncan Lewis was even more damning in his view of Australian PME, particularly of the CDSS and the senior DSSC. He observed:

[I am] in despair over what has happened out at Weston Creek, where the Centre for Defence and Strategic Studies [delivering the DSSC] has effectively become dumbed down. The earlier courses were attended by brigadier-level service people, and they attracted top-level outsiders. Now we have a course for colonels that attracts few top-level outsiders.⁷¹

The studies and reports from the 2000 Zimmer-McKern through to the 2012 ASPI Inquiry – alongside professional development studies in 2011 by Orme and Jans in 2013 – are remarkably consistent documents that repeatedly identify the major weaknesses in Australian military education. The material highlights the lack of an effective Defence education policy; the absence of a PME continuum to contribute to the intellectual health of the Australian profession of arms; and a dissatisfaction with outsourcing PME to universities without

a dissatisfaction with outsourcing PME to universities without consistent guidance on core subjects by an expert cadre of in-house soldier-scholars. The various reports and studies also demonstrate an overreliance on a twentieth-century episodic residential system of PME with little consideration of more flexible twenty-first century delivery models and a failure to define baseline knowledge to direct pedagogy on residential courses such as the ACSC. Worst of all, the cumulative result of all the above weaknesses for the ADF as a profession was the emergence of two serious decade-long' intermissions in PME between ADFA and ACSC and then ACSC and DSSC respectively.

Given that the above weaknesses were regularly exposed between 2000 and 2013, one might have expected reform measures to have occurred. Yet the years between 2013 and 2017 - which in retrospect was a period of darkening regional strategic outlook for Australia - were locust years. The ADF failed to systematically address PME reform and appeared to adopt a mindset of learned helplessness in which educational weaknesses became inconvenient truths. None of the main recommendations or findings of the 2000-13 reports on joint PME reform were seriously considered or introduced into the ADC. There was little progress in developing operational art at the ADC, in expanding behavioural science, producing more uniformed scholars, creating an academic faculty or the publication of a flagship professional journal.⁷² The only notable change in educational capability was Major General Orme's decision in mid-2013 to create the General Sir Francis Hassett Chair of Military Studies, a position attached to a

The ADF failed to systematically address PME reform and appeared to adopt a mindset of learned helplessness in which educational weaknesses became inconvenient truths. None of the main recommendations or findings of the 2000–13 reports on joint PME reform were seriously considered or introduced into the ADC.

one-person Centre of Defence Research located in the CDSS. The Hassett Chair was accredited as a professorial position by Deakin University – and although a positive change – the new position suffered from being created in a PME vacuum and located in a Potemkin-style research centre without significant resources or support personnel.⁷³

Instead of reform measures based on the existing reviews, a separate major management review of Defence conducted in 2014 and published in 2015 as the *First Principles Review*: *Creating One Defence*, saw the position of COMADC assume a broader remit, including responsibilities for joint heath as well as joint education.⁷⁴ The result of this change was even less attention could be given to the challenge of educational reform.

Indeed, between 2013 and 2017, greater financial austerity and intensified outsourcing were imposed on the ADC. Cost-cutting elevated processes of managerial efficiency over the production of educational effectiveness. Even the indoor plants that helped add an aesthetic quality to otherwise sterile study areas were removed from the college. In the area of outsourcing, the Australian National University (ANU) secured an unprecedented decade-long contract with the ACSC from 2012 until 2022. This contract decision reinforced the academic, rather than the professional tone, of the staff college syllabus. Military history was overemphasised by the ANU at the expense of interdisciplinary studies. For example, three extremely rare and valuable professional electives at the ACSC, covering counterinsurgency warfare, aspects of military planning and strategic logistics respectively, were discontinued by the new provider. The CDSS did not fare much better. The period 2013 to 2017 saw the CDSS lose several respected and experienced members of staff while suffering from deep budget cuts alongside a high turnover in academic advisers from its own provider, Deakin University.⁷⁵

In many respects the story of Australian PME between 2001 and 2017 is one of what two leading American military scholars, Douglas Pike and Roger Spiller – drawing on the English philosopher, Aldous Huxley – describe as the phenomenon of 'vincible ignorance'.⁷⁶ It is a state of mind in which an organisation does not know how to resolve a set of problems, and understands that it does not know, and yet it believes its lack of knowledge does not matter or make a difference. An institution in the grip of vincible ignorance becomes trapped in a repetitive mindset that arrests the introduction and application of remedial action.⁷⁷ Pike used the notion of vincible ignorance to explain why the United States military failed to change its strategy in the Vietnam War, even though it understood it was not working.⁷⁸ As Spiller points out, 'where an organisational hierarchy manages knowledge by subordinating it to process, the potency of the knowledge that the institution does possess is inevitably dissipated'. In such a situation, knowledge counts for less and less until its acuity – its capacity for affecting change – simply disappears.⁷⁹ Vincible ignorance is an accurate description of the ADF's attitude towards PME during the first two decades of the twenty-first century. These years saw the development of an institutional mindset that fostered dependence over independence; credentialism over creativity; academic stricture over professional knowledge; and superficial understanding over serious study.

The Coming of Change: The Ryan and Edgeley PME Reforms 2018–23

Reform measures were only introduced into Australian PME in 2018, led by Major General Mick Ryan (COMADC 2018–21) and his successor Air Vice Marshal Stephen Edgeley (COMADC 2022–23). Both commanders were highly educated with strong backgrounds in British and American PME. Both officers were also aware of the ADF's shortcomings in educating its members for the fluid conditions of the twenty-first century strategic environment.⁸⁰ Both commanders sought to overhaul Australian PME and in the process found themselves hampered in their efforts by an array of organisational challenges, ranging from the availability of resources to a lack of corporate memory, and weak staff expertise and institutional support.⁸¹

Beginning in 2018, Major General Ryan set about developing an 'intellectual edge' for the ADF by devising a long overdue joint PME continuum involving four core areas of professional learning (national security policy and strategy; technology and capability; joint warfare; and command, leadership and ethics).⁸² While outlining a continuum was a step in the right direction in that it recognised that effective joint PME must be organised as a holistic system, implementation was painstaking and hampered by inadequate resources and the lack of qualified staff. Ryan's second reform was more controversial. In 2019, the long-established CDSS was abolished and the DSSC and ACSC courses were centralised into a new Australian War College under a single one-star officer.

Opinion was divided on the construct of a War College. Some critics viewed its creation as an unwelcome Americaninspired importation ill-suited to the ADF with its British origins, small size and generalist approach to military education. Others welcomed the War College as a breath of fresh air and indicative of a long overdue concentration on the ADF's core business of warfighting. Yet others expressed concerns about a lack of a suitable syllabus for the new entity and weaknesses in expert war studies staff due to the reliance on outsourcing to a civilian university. As one senior officer commented, creating an Australian War College without the right syllabus and qualified joint staff was a long-term reputational risk for the ADC and was akin to 'painting a donkey with stripes and calling it a zebra'.⁸³ Despite the above reservations, the establishment of an Australian War College was, on balance, a reform measure in the right direction but one that requires rigorous intellectual investment if it is to become effective in coming years.

The Ryan reforms also involved an expansion of staff for the Centre for Defence Research, a greater focus on educational seminars and, most importantly, the long-awaited creation of a 'flagship journal' in the form of the *Australian*

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Journal for Defence and Strategic Studies, complete with an editorial board of both local and international scholars and defence specialists. However, Ryan's hopes for the creation of a Joint Studies Centre along the lines recommended by the Smith-Bergin Review floundered because of resistance from inside Defence.⁸⁴

From early 2022 until mid-2023, Air Vice Marshal Stephen Edgeley continued the reforms begun under Ryan. Edgeley was the first COMADC to possess a PhD and was, in academic terms, the most highly qualified senior ADF officer ever to hold the position. Although his tenure was short it was valuable in terms of extending the diagnostics for reform. Finding the Australian PME system to be too episodic and fragmentary, Edgeley focused particular attention on the quandary of reconciling a growing academic context with diminishing professional content in the ADC's syllabus offerings.⁸⁵

After attending a series of PME activities at ACSC he concluded that the system at that level was 'a sausage factory of general education' and was inadequate in preparing officers for the operational environment of the twenty-first century.⁸⁶ He wanted to continue Ryan's work by aligning resources to a holistic PME continuum that yielded positive outputs to support the ADF's strategic and operational requirements. In an echo of earlier critics, he lamented the absence of PME corporate memory in the ADF:

[The ADC] doesn't know the totality of [its] educational outputs. Each of the education and training institutions have a good understanding of their part of the education continuum, but we have almost no comprehension of how they relate to each other and whether it provides the necessary coverage of the JPME [Joint Professional Military Education] continuum ... We can't possibly know if we're meeting the needs of the joint force if we don't have a complete picture of what we're teaching.⁸⁷

By the end of his tenure in July 2023, Edgeley came to believe that given the DSR's declaration that Australia faced the most serious strategic circumstances since the Second World War, a comprehensive review of JPME would be too time-consuming. Any new review risked reinventing the wheel by 'revisiting problems already identified by earlier [PME] reports.' Instead, if progress were to be made in the mid-2020s and beyond, it could only be accomplished by an 'influence campaign' that pursued targeted measures aimed at accomplishing meaningful curriculum changes buttressed by sufficient resources. Reform measures, suggested Edgeley, required a much stronger focus on core PME knowledge; improved online resources for study; and revisiting the need for an in-house cadre of 'profession of arms experts' to balance educational deficiencies stemming from overreliance on outsourced academic delivery by university providers.⁸⁸

The survey of PME challenges in part one of this report ranging from Zimmer-McKern in 2000 through the Orme, ASPI and Jans reports in 2011–13 – along with reform initiatives begun by Ryan and Edgeley between 2018 and 2023 – provide a starting point for discussing the future needs of Australian PME in the twenty-first century. Here *caveat emptor* applies. If Australian military education is to overcome a legacy of vincible ignorance, it is important to situate further PME reform measures in the context of enhanced military professionalism. The connection between military education and the health of military professionalism is vital, intimate, and reciprocal because its end product is a symbiosis of institutional expertise. Yet, proponents of Australian PME reform in the 2020s need to be aware of the 'crisis of expertise' that has arisen in Western societies in the form of postmodern challenges to the role of professions in producing knowledge for the benefit of society. It is vital that the ADF understand the pressures on advanced armed forces establishments and their education systems from the postmodern assault on the philosophy of the professions as the guardians of expertise. It is to this serious societal challenge and its military implications that the second part of this study now turns.



Attendees listen to Professor Audrey Cronin deliver the Chief of Army Keogh Chair 2015 Seminar at the Australian Defence College, Canberra, 14 August 2015.

Part II

The Crisis of Expertise: Postmodern Challenges to Professional Military Knowledge and Its Implications for the ADF

As early as 2004, Hugh Smith wrote presciently that the coming of a post-industrial age meant that 'the [Australian] military profession is at a crossroads and perhaps at cross-purposes'.⁸⁹ Almost 20 years on, the ADF faces the phenomenon of a 'postmodern military' in which traditional mission-based warfighting is now being combined with increasing calls to integrate a growing array of task-based 'national security' skills in the continuum of military education.⁹⁰ While the requirement for military professionalism might seem natural and obvious, it is in reality, a difficult challenge given twenty-first century societal conditions in Australia, as part of the postmodern West. We should not underestimate the impact of changing economic roles, societal beliefs and communal values on the future of the ADF's status, and its ability to recruit and retain personnel. Australia is now a 'post-deferential society', concerned more with individual attainment than collective norms and in which military service is less and less a career choice for a demographic that ranges from Millennials to Generation Z.⁹¹

Nor can we avoid the power of narratives intensified and accelerated by electronic media outlets that now shape public perceptions about the integrity of the great professions – from the priesthood through doctors and lawyers to the armed forces. We can best understand the challenge facing military professionalism by realising that it is part of the general crisis of the professions as a whole. Ours is an age when accusations of priestly abuse, medical malpractice, legal blundering, and military transgression have combined to erode the integrity and public standing of the great professions. It is important to note that the ADF's public profile in the twenty-first century has been higher in national civil emergencies (bushfires to COVID-19) than it has been in its core business of warfare.⁹² When warfare has come to the fore in the national consciousness, it has arrived in the unwelcome form of war crimes allegations, as outlined in the 2020 *Inspector-General of the Australian Defence Force (IGADF) Afghanistan Inquiry* (the Brereton Report) – raising crucial questions about the integrity of military professionalism in terms of ethics, operating standards and, above all, command accountability.⁹³ Australian military professionalism is not a 'simple given' to an onlooking and sceptical public with access to an immediate online world of information and images.

At the same time, a combination of market forces, outsourcing, and rapid algorithmic technological advances threatens to make traditional professional expertise either redundant or replaceable by interpretations derived from huge databases. We have entered the 'second machine age' – a global era of connectivity, automation and innovation – in which we must 'race with the machines, not against them' to maintain professional knowledge.⁹⁴ The status of a professional as a human expert must, in such conditions, be constantly reaffirmed, demonstrated and upheld. This is true of the surgeon in the operating theatre, the lawyer in court, the priest in mass and the military officer in a combat zone.⁹⁵

The Professions, Military Knowledge and the Rise of Security Expertise: What the ADF Must Understand

In 2012, Larry Summers, President of Harvard University and a former Chair of the White House Council of Economic Advisers, warned that the entire basis of knowledge transmission was being revolutionised by digital technology. 'The next quarter of a century', Summers predicted, 'will see more change in higher education than the last three combined'.⁹⁶ It is a technological revolution in knowledge production, which has been variously called 'the crisis of expertise' and the 'coming of a post-professional era', that is challenging the autonomy and status of the legal and medical professions, as well as the role of the clergy and military in society. A broader functionality of expertise through a digital technology revolution is beginning to dominate society at the expense of the traditional professions.⁹⁷

The ADF will not be immune from the existential challenges that have begun to envelop not just the profession of arms but the civil professions as well. The crisis stems from a 'historical transformation of knowledge production' from professional monopoly towards a multiplicity of expertise.⁹⁸

Before examining the implications of the crisis of expertise on the military profession, it is useful to understand a broader societal context by snapshotting the intellectual challenges faced by the civil professions. Richard and Daniel Susskind point out in their seminal book, *The Future of the Professions*, that as 'print-based industrial society' gives way to a 'technology-based Internet society' – dominated by human-machine connectivity – the education systems of the professions are likely to be transformed by a revolution as far reaching as the one that occurred from the era of script to the era of print.⁹⁹ The Susskinds argue that great civil professions such as law, the clergy and medicine are – like the modern military – artefacts of the West's nineteenth-century print-based industrial society whose monopoly on knowledge is waning in twenty-first century conditions. They argue 'we are approaching the end of an era … We are advancing into a post-professional society' that is characterised by networked forms of expertise.¹⁰⁰

As knowledge monopolies, the professions are threatened by the emergence of postmodern hybrids of networkedexperts, paraprofessionals, and assorted knowledge engineers and human-machine advocates – all offering online data availability or spearheading advances in learning science.¹⁰¹ These trends challenge professionalism as a defined body of expert knowledge based on a system of continuing education. For example, the American WebMD network had more monthly visits in 2014 than all the medical surgeries in the United States. Similarly, in the legal profession, online dispute resolution now outnumbers the number of lawsuits filed in the American court system.¹⁰²

The above trends have already begun to challenge military professionalism through the activities of military contractors, non-state fighters and militas and postmodern notions of expanded jurisdiction. Audrey Kurth Cronin has written about how the dispersion of emerging 'off-the-shelf' technologies – from drones to robotics – have created an 'age of lethal empowerment' favouring private armies.¹⁰³ The rise of privatised military firms (PMFs) and private military companies (PMCs) are a manifestation of the arrival of a postmodern *condottieri* and symbolise the diffusion of military expertise.¹⁰⁴ One statistic illustrates the point: in the early 1990s the ratio of PMC personnel to professional military personnel was 50:1. By the early twenty-first century it was 10:1. Today, organisations such as the Russian Wagner Group are merely the most publicised of the PMC phenomenon.¹⁰⁵ As early as 2008, P.W. Singer could write:

the old proverb used to be that 'War is far too important to be left to the generals'. For the twenty-first century, a new adage may be necessary. War is too important to be left to private industry.¹⁰⁶

Post-Professionalism: The Challenge of Security Expertise to Military Professionalism

Not surprisingly, there have been suggestions in various scholarly and policy circles for the military profession to accept that uniformed military officers are no longer the sole 'managers of violence'.¹⁰⁷ Meredith Kleykamp, Director of the Center for Research on Military Organization at the University of Maryland argues:

The very notion of professions as bodies of experts holding special access to knowledge is in decline. Many professions beyond the military are facing challenges from 'lay experts' who hold some claim to expertise without being formally recognized as experts by the profession.¹⁰⁸

The intellectual premise of some scholars is that the sociology of the military profession is now outdated and must be replaced by a new sociology of security expertise. Security expertise is defined as consisting of a cross-functional network of national and transnational, public and private security actors who are engaged across a battlespace or operational area. According to the logic of security expertise, military education must embrace the transition brought about by the end of conscripted militaries, the rise of new media technologies and the civilianisation of military functions, such as logistics, transport and technical support. Tamir Libel argues that the armed forces face declining social status because a process of 'unprecedented outsourcing in the military realm' now favours an occupational over a professional ethos.¹⁰⁹ The rise of a networked public-private nexus in security expertise is but the most visible manifestation of the decline of the military profession's autonomy as well as its control over violence.¹¹⁰

Advocates of security expertise favour an emphasis on civil-military cooperation and inter-agency forms of education associated with the creation of national security professionals. According to this logic, the profession of arms must tolerate its lost status and diminished role by accepting the arrival of 'a new social form of military knowledge production associated with security expertise'.¹¹¹ The philosophy is explained by Thomas Crosbie and Meredith Kleykamp in the following terms:

A military expert is thus a member of the network of individuals inside and outside military organizations who contributes to policies informing the actions of military organizations. While the purest expression of this may be on the battlefield . . . military expertise can be understood as a subcategory of security expertise, focused on what militaries do within the broader security environment, shared between civilian and military communities of practice, but lacking sharp definition.¹¹²

Before examining the future reforms required in Australian PME, it is necessary to carefully evaluate the 'postprofessional' proposition that the military as an autonomous vocation is being supplanted by networks of security experts. The connection between military education and military professionalism is intimate and reciprocal because specialised knowledge of the art and science of war nourishes the strength of officer performance in the test of arms. It is to the continuing uniqueness of the profession of arms as the legally sanctioned armed guardians of society that we must now turn.



Chief of Staff of the United States Army, General Mark Milley addresses students studying at the Australian Defence College in Canberra during a visit to Canberra on 22 February 2018.

Part III

Framing Educational Reform: Reaffirming the Role of the Australian Profession of Arms in the twenty-first Century

The Australian military profession must not become overwhelmed by postmodern pressures ranging from technical outsourcing, armed non-state actors and the diffusion of security expertise. Like its Western counterparts, the Australian profession of arms shares features in common with the civil professions: control over membership, self-regulation, expert training and a code of ethics. Yet, it also differs profoundly from civil society because, in the words of American historian Walter Millis, military service has some of the qualities of a priesthood, of a professional civil servant, of a great bureaucratic business organisation and of an academic order, 'but it corresponds to exactly none. It is set apart therefore from those who have followed other walks of life.'¹¹³

A career in the ADF contains four unique features that set military professionalism apart from civil society. First is the unlimited liability clause of sacrifice of life. The second is the paradox of having command of lethal force that is infrequently practiced in real-life, leading to theory–practice and bureaucratic–professional tension. Third, there are the new jurisdictional pressures on ADF officers to become national security professionalism. Finally, and most relevant for PME, there is the challenge that the military, unlike the civil professions, lacks a common body of academic knowledge for educational purposes. All four of these features are likely to endure – at least in a liberal democracy like Australia, underpinned as it is by the rule of law – but each feature needs to be fully understood by the ADF if it is to counteract notions in PME of a 'post-professional conception of military expertise'.¹¹⁴

A Sacrificial Profession: The Unlimited Liability Clause

The task that separates the profession of arms from all other occupations, is that its members must be prepared to sacrifice their lives in honourable service of the state. This pledge is known as the 'unlimited liability clause' in military circles and was formulated in a series of lectures by the Australian-born British general, Sir John Hackett in the early 1960s. Hackett outlined a covenant unique to the military professional:

The whole essence of being a soldier is not to slay but to be slain. The essential basis of the military life is the ordered application of force under an unlimited liability. It is the unlimited liability what sets the man who embraces this life somewhat apart. He will be (or should be) always a citizen. So long as he serves he will never be a civilian.¹¹⁵

Hackett emphasised that the application of lethal force by an officer corps – requires a judicious alignment of professional expertise with moral values, ethical principles and martial virtues – derived from abstract knowledge and transferred into military practice. Under this doctrine, a military professional is required to discriminate between combatant and non-combatants and takes on to himself or herself the danger involved at risk of life. As William Pfaff writes, the taking of life is connected with the losing of life and the soldier's 'warrant to kill is integrally related to his willingness to die.'¹¹⁶

A police officer might assume risk of life on occasion, as might a physician treating an infectious disease, such as Ebola or COVID-19, but these situations are exceptions. In contrast, for the military professional, risk of death is central to professional performance in the field. As the American scholar James Toner puts it:

The preeminent military task that separates [the profession of arms] from all other occupations, is that soldiers are routinely prepared to kill ... [and], in addition to killing and preparing to kill, the soldier has two other principal duties, rarely discussed ... some soldiers die; when they are not dying they must be preparing to die.¹¹⁷

The Australian profession of arms is no exception to the concept of the unlimited liability, which is frequently affirmed as the basis of honourable service.¹¹⁸ In November 2010, Vice Chief of the Defence Force, Lieutenant General David Hurley upheld unlimited liability as foundational to the ADF, stating that the notion 'skilfully captured the essence of the sacrifice that both binds the military man and woman to their society yet sets them apart within it'.¹¹⁹ Given the pressures from 'post-professionalism' and the notion that military professionalism is a mere sub-category of security expertise, it is important to constantly reinforce the unlimited liability philosophy. This is especially true in the military preparation of a younger generation that is increasingly a product of inferior post-modern schooling, which emphasises self-fulfilment and feelings over social duty and perseverance.¹²⁰

The Theory-Practice Divide: Command of Lethal Force, Lack of Practice in Warfare and Bureaucratic-Professional Tensions

The legal authority conferred on the military profession to employ organised violence is a unique responsibility held by no other institution of the modern state. Aspects of armed policing cannot compare with the organised character of warfare in a contested area of operations. An officer's control over human lives makes the phenomenon of military command different from the leadership and management norms found anywhere in the civilian professions. Yet the challenge for command is problematic, in that control over the application of lethal force by a military professional is contingent rather than continuous. Unlike doctors, engineers, lawyers and priests, the military professional may not practise his or her core expertise (skill-at-arms) on a regular basis.¹²¹

Indeed, more time may be spent on preparation for, rather than on conduct of, warfare. It is possible, then, for a military professional to serve for three decades, training operationally every year, yet never be deployed into a war zone or ever be placed in harm's way. The dominance of deterrence in the nuclear age led to a widespread Cold War belief in intellectual circles that the chief purpose of conventional armed forces was to deter wars rather than fight them.¹²² The post-Cold War dominance of neoliberal ideology, with its market outsourcing and civilianisation practices, also weakened the warfighting readiness of the armed forces, particularly in key areas such as logistics and specialist staff organisation. This paradox of contingency over constancy makes military education all the more important to the uniformed professional – who must first imagine what war will involve – long before he or she experiences its reality.¹²³

Yet, episodic or rare practice of warfare also makes military education seem problematical, since it can be seen as mere schoolroom theory or history delivered in a vacuum divorced from operational practice. Military colleges with their neat lawns, comfortable lecture halls and well-stocked mess facilities may not seem proper preparation for the crucible of war to sceptical officers. Unlike the civil professions where theory from education and professional practice interact daily in courtroom, surgery and rectory, this process does not occur in military academies or barracks. This theory–practice mismatch makes the Australian military profession prone to bouts of anti-intellectualism, with a preference for bureaucratic and management routines. As the great French soldier, Marshal Maurice de Saxe once wrote, military routines without practice of war lead to a situation which 'in default of not knowing what should be done, they [officers] do what they know.¹¹²⁴

Under such 'do what they know' conditions, a spirit of occupationalism can easily infect the military. An atmosphere can develop that dilutes military members' interest in their vocation as a social trust profession which possesses special knowledge and expertise. This situation has been the case in some parts of the ADF. As seen from the work of Smith,

Bergin, Orme and Jans, the institutional foundations of Australian military professionalism are both underdeveloped and unanchored in professional knowledge. It comes, then, as no surprise to learn that some ADF members do not believe the profession of arms is a *bona fide* profession, still less one that is evolving towards a twenty-first century 'joint warfare profession'. In August 2021, an ADF one-star officer in a submission to the Chiefs of Service Committee (COSC) stated:

The 'profession' of arms is a polarising term. I do not think the military is a profession and think that the 'profession of arms' bit is overdone in the doctrine. If this is intended for all ranks, do junior ranks consider the military a profession? Does the military meet any of the tests to be a profession and is the answer consistent across all ranks? [The] Profession of Arms may not be an accurate title/reference for the whole of the ADF.¹²⁵

It is a mistake to dismiss this worldview as merely that of a maverick Australian senior officer for two reasons. For one, it is a view that accords with international trends of post-professionalism and the sociology of security expertise noted previously. Second, the occupational outlook expressed also reflects the local peculiarities of Australia's civil-military diarchy, a form of governance that has dominated defence governance for half a century. Like other peer militaries, the modern Australian officer corps resembles a hybrid of profession and bureaucracy with a dialectical tension running

between the two poles of activity. The diarchic patterns of the ADF and the Defence bureaucracy converge and intertwine and, if not managed well, blur distinctions between military identity and bureaucratic function affecting preparation for the conduct of war ¹²⁶

The Australian system of defence governance has been prone to this blurring because its diarchy often seems to favour the concerns of civilian managerialism over those of military professionalism. Over time, this situation has resulted in an accumulation of tensions that have contributed to an organisational dysfunction in the Department of Defence that is the despair of politician and public. The declaration in the 2023 DSR that the Defence enterprise is inadequate for contemporary and future challenges is merely the latest manifestation of a finding that has echoed across some 35 Defence reviews since 1982. Tellingly, the subject of civilmilitary relations, a staple of PME curricula in every other Western peer military is almost completely neglected in Australian military education in favour of courses on defence management.¹²⁷ The diarchic patterns of the ADF and the Defence bureaucracy converge and intertwine and, if not managed well, blur distinctions between military identity and bureaucratic function affecting preparation for the conduct of war.

Given the reality of the ADF's professional–bureaucratic interface, it is worth briefly examining the relationship between a profession and a bureaucracy and the reasons why, in the words of Patricia Cook, the military remains 'a singular profession' like no other in existence.¹²⁸ A profession is distinguished from an occupation by theoretical knowledge as its *credat emptor* (buyer have faith) as opposed to *caveat emptor* (buyer beware). As a social trust profession, the armed forces should not, despite their need for hierarchy and headquarters organisation, operate primarily as a bureaucracy of functionaries. Unlike a defence bureaucracy that deals mainly in organisational process and efficiency, the military profession works with expert knowledge and is concerned with effectiveness. Unlike defence bureaucracies that motivate their workers primarily through extrinsic factors (salary, benefits and bonuses), uniformed professionals place the greatest value on their intrinsic service to society as a vocation. There are essential characteristics in the military profession that are not manifested by defence bureaucracies. These include military expertise, honourable service to society, *esprit de corps*, stewardship of the profession, social trust, and the right to autonomy and self-regulation.¹²⁹

It is the task of the strategic stewards of the Australian profession of arms to ensure a proper balance exists between bureaucratic efficiency and military effectiveness and that the highest professional standards and ethics are always upheld. A military officer may work in an office or base with civilian hours. but he or she remains a professional individual holding a commission and belonging to an expert body.

Yet, a military organisation, such as the ADF, cannot afford to neglect the bureaucratic aspect of activity, since it relies on administrative processes and hierarchical headquarters to meet the requirements of budgets and personnel.

Military bureaucracies tend to produce what the soldierscholar Bill Bentley, in his important 2005 study Professional Ideology and the Profession of Arms in Canada, calls 'elite generalists'. The latter tend to be schooled in a science of management that invokes the virtues of efficiency through occupational standardisation.¹³⁰ As a bureaucracy, a modern military like the ADF may structure its members into numerous occupations, but this approach cannot replace professionalism with its systematic theory-based body of discretionary knowledge derived from education and specialised training. Discretion based on professional expertise promotes a capacity to adapt to novel situations, a skill that is different from that associated with the routines of bureaucracy. As sociologist Max Weber once observed, 'confront the bureaucratic mentality with a new situation and it is helpless'.¹³¹ The greatest danger from military bureaucratic imperatives for the ADF lies in the commodification of its military professionals into 'privileged technical workers'. As Bentley warns, civilian-style commodification of activity strikes at the very heart of military professionalism because it compromises the privileges of autonomy and self-regulation.132

The tension between bureaucracy and professionalism in military governance often becomes difficult to balance. Emphasising the primacy of professional knowledge is therefore one of the best paths towards ameliorating the

dilemma of dealing with bureaucracy. For example, the organisational notion of 'One Defence' in the 2015 *First Principles Review* reflects a long-held bureaucratic philosophy based on the need for far greater efficiency in expending resources and developing capability acquisition skills. Nonetheless, the idea of the ADF and the civilian Department of Defence acting as 'a single Defence team' may inadvertently reduce the ADF's quest for professionalism. The truth is that the military and the public service are very different professions with different perspectives and ethical priorities. As Hugh Smith warned in 2004:

rather than trying to harness a horse and an ox to a single cart, it is preferable to recognise a distinct profession of arms and a distinct profession of Public Service.¹³³

One Defence tends to blur this distinction by presenting Defence as a multi-task organisation rather than a missionbased institution with its ADF members focused mainly on preparing for the traditional role of warfighting. This is not to suggest that One Defence lacks value or efficacy, it is only to warn of the law of unexpected consequences. The risks of a One Defence philosophy inadvertently helping to create a bifurcated ADF into a minority of elite warfighters – such as the Special Forces on the one hand and a majority multi-task ADF on the other– were unanticipated and largely unrecognised in the second decade of this century. The reality of an ADF *corps d'elite* regressing into pathological and extra-legal behaviour, in what American scholar, Roger Beaumont calls a military counterculture of 'encapsulated delinquency', has come to pass in Australia – as the 2020 Inspector-General of the Australian Defence Force (IGADF) Afghanistan Inquiry revealed.¹³⁴

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It is the task of the strategic stewards of the Australian profession of arms to ensure a proper balance exists between bureaucratic efficiency and military effectiveness and that the highest professional standards and ethics are always upheld. A military officer may work in an office or base with civilian hours, but he or she remains a professional individual holding a commission and belonging to an expert body. The stewards of the military must understand that in an era of post-professionalism with its ideas of security expertise, professional status cannot simply be proclaimed. On the contrary, it must be consistently upheld to ensure that a professional ethos permeates the institution and infuses the daily performance of its members. Central to military professionalism is the realisation that knowledge of war and conflict form a systematic theoretical structure that shapes the military ethos through education, training and experience. Those militaries whose leaders fail to balance their bureaucratic-professional interface successfully, invariably experience a decline in their professional character – as many observers have noted with regard to the German *Bundeswehr* and several other twenty-first century Western European militaries. The aphorism that: 'Bureaucracies promote; Professions certify' is relevant here.¹³⁵

Expanding Jurisdictional Pressures: The Military Officer as a National Security Professional

In the twenty-first century, the military profession is often required to situate its expertise in the framework of joint, interagency and multinational cooperation for national security purposes. The need for this kind of knowledge and consideration of jurisdictional boundaries is far less pronounced, if found at all, in the civil professions. More than any other profession, the military is increasingly called upon to exercise greater consciousness of its role as a component of national power and to consider its activities in a 'whole-of-government' context. There have been calls for the military professional to be cross-jurisdictional specialists – an 'alchemical blend of multiple archetypes' – encompassing those of emergency services officer, diplomat, police officer and social worker.¹³⁶ In Australia in recent years, the ADF has been involved in immigration control, drought relief, flood and bushfire emergencies and COVID-19 pandemic control. Yet, the role of military professionals is not to be 'all things to all people', within a loose network of emergency service or security expertise where the burden of civil requirements reduces their unique skills as warfighters. As Harold Lasswell wrote in 1950, 'there are no experts in national security. There are only experts on aspects of the problem.'¹³⁷ This statement is the beginning of wisdom when considering requirements for domestic national security; it is also a useful counter to scholarly notions that a 'sociology of security expertise' can replace the unique knowledge conferred by military professionalism.

It is notable that successive Australian governments have avoided producing documents that call for dedicated 'national security expertise'. One reason for this hesitation seems to be a recognition that an unfocused national security strategy risks being symbolic not substantial and theoretical rather than practical. The official preference continues to be to uphold the distinct professional knowledge of the ADF as separate from that of diplomats, lawyers, emergency managers and law enforcement officers.¹³⁸ In the 2020s, the ADF must be prepared to lead 'whole-ofgovernment' defence missions and to contribute to humanitarian and disaster relief operations. Yet in terms of national security, these missions are not its core business. Lasswell's 'aspect of the problem' in national security that remains the unique responsibility of the ADF is the lawful delivery of organised and lethal force in the service of the state.

Lack of a Single Body of Academic Knowledge for Military Education

The American Nobel laureate and strategist, Thomas Schelling writes that 'the military services, in contrast to almost any other sizable or respectable profession, have no identifiable academic counterpart'.¹³⁹ Australia is no exception to Schelling's observation. Lack of an agreed academic field to underpin the profession of arms represents a fundamental difference between the ADF and Australian civil professions. Unlike law or medicine, the body of knowledge required is less a single discipline than interdisciplinary in character. This situation reflects the reality that military art and science represent a body of knowledge that encompasses academic education, professional expertise and training regimes. This realisation led Napoleon Bonaparte to proclaim that the military profession was 'the giant among the branches of learning for it embraces them all'.¹⁴⁰

As a result, Australian military education is generalist in character with academic material assuming an important role but, as noted earlier, often 'without any clear [military] specification of what fields or disciplines are essential'.¹⁴¹ In the ADF, a generalist approach pursues academic context over professional content simply because most Australian universities lack defence studies expertise. Thus, international relations, history and political science tend to dominate the curricula. Professional subjects with an academic corpus such as military theory, operational and strategic art, military sociology and civil-military relations are frequently neglected or confined to training. Again, as noted earlier, the reason for such neglect of core areas of a military officer's education is that many ADF officers either lack the qualifications or educational expertise to teach them effectively. As Bill Bentley points out, ideal military knowledge involves a unique 'wedding of a liberal education to specialised development and training, honed by experience'.¹⁴² Mastery of an interdisciplinary body of military knowledge is demanding and requires a coupling of the best ideas from science, technology, the social sciences, the humanities and doctrine for their tactical, operational and strategic application. This interdisciplinary mastery of knowledge, which is unique to the profession of arms, is currently either inadequate or missing in twenty-first century Australian military education.

The four unique characteristics of the profession of arms outlined – the unlimited liability clause, infrequent practice of warfare creating a bureaucratic-professional tension, jurisdictional pressures from national security pressures and lack of a common body of academic knowledge – need to be understood and embedded in an effective and modernised PME system. Such a system has not existed in the ADF in the first two decades of the twenty-first century making military educational reform essential. It is to the vexed problem of changing the PME system to meet the requirements of the Australian profession of arms in the 2020s, 2030s and beyond that this essay now turns its attention.

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Part IV

Reforming Australian PME for the Twenty-First Century: Key Measures into the 2030s

Given the plethora of reports, reviews and critiques of Australian military education over two decades, the challenges facing the ADF are less unknown than neglected or ignored. There has been, and continues to be, an inadequate understanding in Australia of the intimate connection between the strength of military education and the health of the profession of arms. One might, then, pose Lenin's famous question: 'What is to be done?' A new review is not required and would simply expend time reinventing wheels and admiring existing long-standing problems. If the ADF is to possess a PME system in the 2020s and 2030s that maximises the intellectual capability of its members then remedial measures must be undertaken of already identified weaknesses. Remedial measures must also be linked to the realisation that the resource base available to Australian military education will not see an increase until the late 2020s. Suggested reforms must therefore be undertaken within tight fiscal parameters. Despite resource constraints, the ADF should not embrace learned helplessness; it is perfectly possible to introduce practical and wide-ranging reform measures out to 2030.

The first reform measure is philosophical and requires a re-conception of Australian military education as a holistic, three-tier continuum of activity embracing academic education, professional foundation studies and military training. Currently, the middle tier of professional foundation studies is almost entirely missing in Australia and represents a major risk factor for the joint force.

Second, the ADF must move from its current overreliance on long, episodic residential courses at ADFA and ADC to a greater utilisation of shorter and blended continuous career PME courses that exploit new and emerging digital technologies and forms of pedagogy. The aim here is to use short professional studies courses to eliminate the two 'ten-year gaps' that plague current PME and result in areas of deficient professional knowledge. Such a continuous and holistic system would create much better integration between academic education, professional studies and training.

Third, the ADF must as a priority seek to create a 'soldier-scholar' cadre of profession of arms specialists who can teach military subject matter in a 'professional school' manner that is beyond the academic expertise and experience of any civilian university provider. The ADF must take control of the delivery of its core knowledge and ensure essential material is not ignored, neglected or simply left to academics to try to teach. Anything less than control of core knowledge by the ADF and its PME institutions represents a dereliction of duty.

Fourth, the ADF would greatly benefit from the type of joint studies centre recommended by earlier reviews, which could keep the military profession abreast of changes that could be incorporated into PME, keeping material up to date and relevant for practitioners. Such a centre could provide both educational and research expertise and would not be prohibitively expensive.

The four reforms outlined above would greatly enhance Australian PME and amount to a 'duty of care' mission for the stewards of the ADF. Conversely, ignoring them through continued neglect of military education will open the ADF to the risk of officers and NCOs who are intellectually deficient in the skills of imagination, adaptability, and innovation required to manage machine capability and execute joint and multidomain operations.

Reform Measure 1: Reconceiving Australian Military Education as a Three-Tier Career-Long Continuum

Much is made of the ADF as a learning organisation but less of what the institution should teach its personnel over their military careers. A prescription for endless learning without clarification on priorities invites the extraneous to overwhelm the essential. A clear philosophy of learning objectives ranging across a thirty-year career is required. In the twenty-first century, effective Australian PME should not be conceived of as a traditional two-tier system composed of

What is almost entirely missing in ADF military education is the middle layer of professional foundation studies. The latter is a body of knowledge that is situated between the requirements of academic education and the formalities of military training. academic education on the one hand and military training on the other hand. This duality has led to the quandary of finding a balance between the academic and the practical and prevents a clear understanding of the relationship between education and training. If PME is considered in terms of a *gestalt*, or holistic adult learning system, then, the relationships between education and training can be better understood. In a learning *gestalt*, while education and training are clearly different endeavours, they both contribute to the single professional outcome of an effective military and are not mutually exclusive. As General David Berger, Commandant of the US Marine Corps, observed in 2019, 'we will not train without the presence of education; we must not educate without the complementary execution of wellconceived training'.¹⁴³

Because the ADF lacks an overarching *gestalt* of adult learning, Australia's system of military development suffers from a philosophical confusion between training and education. This confusion has in turn contributed to the emergence of serious gaps in PME. In Australian conditions, a twenty-first century military education system must be viewed as composed of three components of adult learning.

First, academic education (provided by contracted university scholars); second, professional foundation studies (provided by scholars and military professionals in unison) and third military training (provided by uniformed military experts). In each layer of learning – academic education, professional studies and training expertise – there must be a careful baseline of learning requirements defined and taught.

What is almost entirely missing in ADF military education is the middle layer of professional foundation studies. The latter is a body of knowledge that is situated between the requirements of academic education and the formalities of military training. As a recent study notes, 'located mid-way between training and education, professional studies constitute the teaching of academic subject matters, which are strictly relevant to the military profession (such as policy formulation, counterinsurgency or psychological warfare)'.¹⁴⁴ Professional foundation studies are defined in this study as 'studies which draw on academic and military knowledge, but which are designed to promote the effectiveness and viability of military organisations'.

Such studies deal with military subjects that are not favoured or understood by university scholars and for which armed forces' training officers often lack the requisite academic specialisation to teach effectively. The idea of professional foundation studies is not new to Australia. In 1997, Hugh Smith, then Australia's leading military educator, made a convincing case for the introduction of professional studies into PME as a connective middle layer between academic education and training regimes.¹⁴⁵ This paper builds on Smith's work on professional studies and expands it into the concept of professional foundation studies.

For Smith, writing at the end of the twentieth century, professional studies provided knowledge of direct value to military personnel and combined the 'why' and 'how' of learning in a way similar to that found in the professional schools of

the civil professions, such as law, medicine and the clergy. He noted that in Australia such studies have long lacked any conceptual distinction or intellectual basis. Smith wrote:

Professional studies relate to the core of being a military professional. While academic education and military training tend to be specialised for individuals, professional studies include areas of learning that all officers need to know about, at least to a basic level.¹⁴⁶

Smith went on to observe that 'professional studies are the key to military effectiveness [yet] compared with academic education and military training, however, professional studies in Australia need close attention.'¹⁴⁷ He went on to note that Australia had fallen behind peer Western militaries in this intermediate field of knowledge. In comparable Western militaries such as the United States, Britain and Canada, professional foundation studies are integrated into undergraduate and post-graduate PME by a permanent specialist faculty of scholars and military experts, usually equipped with higher research degrees. This situation does not occur in any systematic fashion in Australia because the PME system used is contractor and university based. The main aim of academic education for the ADF is to foster critical thinking skills and powers of analysis rather than seeking to cultivate professional knowledge.¹⁴⁸ In contrast, professional studies are concerned with providing officers with a deep understanding of military art and science. As such, the field needs to be 'practical while resting on a sound intellectual foundation.¹⁴⁹

The weakness of Australia's dualistic approach to PME is fourfold. First, the methodology favours general episodic education based on three residential courses (ADFA, ACSC and DSSC) rather than continuous career-long professional learning across a continuum. Second, academic education focuses on attempting to make the military a 'learned

institution' through exposure to general scholarship rather than creating 'an institution of learners' focused on the specific scholarship of war and conflict. Third, since most Australian academics are not interested in war or military studies, pedagogy concentrates on providing academic context rather than professional content creating a 'knowledge vacuum.' Finally, the knowledge vacuum that ensues cannot currently be filled by the Australian military profession because, while many military officers are expert trainers, they are seldom qualified to be military educators. In other words, for over two decades, the academic *context* of Australian military education has trumped its professional *content*. ¹⁵⁰

Australian PME needs to introduce professional foundation studies that can function as the essential conduit between academic education and military training. What passes for professional foundation studies in the ADF is either conflated with academic education or confused with the requirements of practical training schemes. One of the major reasons for the existence of the 'two 10-year gaps' identified by the 2012–13 reports into the PME continuum was the lack in understanding of the character of professional foundation studies as a middle layer of learning. In Australian military education there is a clear need to find a balance between academic education (development of analytical thinking skills) and military training (task-orientation) through professional foundation studies (understanding of war and the military vocation).

The features of professional foundation studies are also fourfold. First, they are institutional and emphasise lifelong learning. Second, they are vocational and go to the core both in intellectual and philosophical terms of what it means to be a member of the profession of arms, equipped with appropriate knowledge as well as expert training. Third, foundation studies involve both academics and military professionals who teach across the continuum of military education and training. Fourth, such studies give an armed forces establishment proper ownership of its professional knowledge. They allow the armed forces the discretionary flexibility to scaffold PME requirements at key points in

military career development and to remediate any gaps, where and when, these appear. The field can be taught in a basic, introductory manner at a military academy or in an intermediate manner before staff college, or afterwards, as a refinement or advanced refresher before a senior course commences.

In Australian military education there is a clear need to find a balance between academic education (development of analytical thinking skills) and military training (task-orientation) through professional foundation studies (understanding of war and the military vocation). Introducing this intermediate field would improve both the alignment and baselining of the content of the academic and training tiers, help to repair learning gaps, and assist the ADF to pursue the long-term aim of fostering a joint military profession. The pressing need to introduce a three-layer, holistic continuum of PME brings us to the educational revolution that is likely to facilitate the development and delivery of professional foundation studies.

Reform Measure 2: The Implications of the Digital Technology Revolution on PME and Short Course Professional Studies for the ADF

In 1995, in a parliamentary submission, the ADF claimed it possessed 'a comprehensive program of professional military development' that combined education, training and experience to develop skills, knowledge and ethos'. The submission went on to explain that for professional military development 'there is no single, all-encouraging education and training course for the military professional, but rather a series of courses which aim, in turn, to prepare him for each stage of his career'.¹⁵¹ Yet in the mid-1990s, the 'series of courses' mentioned referred only to academic education and military training, and they were forged around episodic residential courses with little focus on continuous education. Almost 30 years on, education in general and military education, in particular, has been transformed by digital technology that permits lifelong learning through online and blended courses tailored to career needs.¹⁵²

In the 2020s and beyond, rather than being delivered in industrial-age, single, long and concentrated doses in-residence, PME is likely to become a post-industrial hybrid of residential and remote courses carefully crafted across a development continuum. The result will be a human-machine learning interface that is likely to transform Australian PME. The traditional 'sage on a stage' in long residential courses will be joined by the 'guide on the side' via a screen, in smaller and shorter courses designed to keep defence professionals up to date. We have entered the age of digital learning, which needs analytical, experiential and competency-based education to operate as an ecosystem.

Computerised devices are increasing the online data available for selfdirected education and are promoting advances in learning science – away from a 'calorie model' of mass, passive learning fed into large cohorts – toward a 'vitamin model' of outcomes-based education aimed at nourishing active learning. Professional militaries face an educational revolution in time and space, driven by the rapid spread of 'learner-centric, technology-enabled' devices. Computerised devices are increasing the online data available for self-directed education and are promoting advances in learning science - away from a 'calorie model' of mass, passive learning fed into large cohorts - toward a 'vitamin model' of outcomes-based education aimed at nourishing active learning. The digital age also allows for a greater appreciation of the complementary roles of education and training using a systems approach to evaluate military learning. In the vitamin model of PME, a mosaic of residential and hybrid remote-residential courses, seminars and webinars are designed to cascade and interact in a systems continuum over a 30-year career. None of these changes render the conventional teaching format of the calorie model involving the 'sage on the stage' obsolete. But what they do imply is the extension of the 'sage's stage' from the traditional lecture theatre to the computer screen.¹⁵³

If Australian PME is to remain effective into the 2030s, it will need to embrace the three different forms mentioned earlier in this study.

The first form is the traditional 'stairwell model' of officer education based on episodic residential course structures,

but of a reformed type that may be shorter and more clearly focused on educational outcomes.

The second type of PME delivery is a 'glide-path model' in which key forms of adult education and training outcomes are accelerated faster through earlier, and mainly remote courses.

Finally, there is a 'runway model' composed of just-in-time blended short courses and seminars, which emphasise reflective practice, active learning, problem solving and situated cognition for improved outcomes.¹⁵⁴

In the years ahead, 'learning innovation' involving the integration of educators, designers and analytics for active, engaged and student-centred learning will come to dominate military education as the new normal. The differentiating factor in adult education will be less residential versus remote courses but rather the quality of design, structure of a given course and its effective delivery in outcomes. Methods are likely to range from massive open online courses through small, private on-line courses to tightly structured blended The fluidity of the twentyfirst century strategic environment increasingly demands a dynamic learning environment with PME designed as a system capable of interdependent and interacting elements to keep the profession current and adaptable.

(remote-residential hybrids) across defence colleges. If the Susskinds are correct in their analysis of the future of the professions, the military profession along with its civil counterparts will be transformed by the 'red pill' of digital technology.¹⁵⁵

As the American Joint Chiefs pointed out in 2020, military education must keep pace with technological and geopolitical change or risk professional irrelevance.¹⁵⁶ The fluidity of the twenty-first century strategic environment increasingly demands a dynamic learning environment with PME designed as a system capable of interdependent and interacting elements to keep the profession current and adaptable.

The task, then, is to reorientate Australian PME from a 'predominantly topic-based model to an outcomes-based approach and emphasise ingenuity, intellectual application and military professionalism in the art and science of warfare, while deepening knowledge of history'.¹⁵⁷ It is a safe prediction that in pursuit of an 'outcomes-based approach' by the mid-2030s, large residential PME courses will become shorter, and blended shorter courses will become far more numerous. The ADF is unlikely to escape the growing reality of changing twenty-first century educational norms and must seek to keep abreast of the latest developments. The ADF must move from an episodic structure based mainly on residential courses towards a professional life-long learning scheme by developing a three-tier system of continuous military education.

It was on the basis of a three-tier professional studies 'outcomes' philosophy that the Centre for Defence Research (CDR) introduced three 05-level blended short courses between 2014 and 2021: the Apollo Course in Future War Analysis; the Strategos Course in Strategic Theory for Practice; and the Advanced Military Studies: Military Theory for Practice Course. These three courses, costing only \$30,000 per annum, are targeted at not only the Australian defence establishment but also other organisations in the national security community, and Australia's international allies and partners. All three courses seek to develop a holistic understanding of security expertise, but to do so in a manner which avoids any notion of a 'post-professional' replacement of separate institutional identities and specialist skills. The educational aim is to reinforce the relationship between the ADF and its civilian counterparts in areas of mutual concern in the realm of national security. They are highly successful professional development activities. Yet despite their proven value they have often confronted institutional indifference and even opposition from a conservative and hidebound PME system. As a result, the CDR short courses often rely on support from stakeholders inside the ADF rather than from its parent organisation, the ADC.¹⁵⁸

The future diversification of military education driven by digital technology and new modes of learning requires the coordinated effort of a holistic *gestalt* enterprise by the ADC. Over time, residential-remote and human-machine learning that are interconnected and transcend time, space, medium and format will emerge to dominate Australian PME. Such

a system is continuous and multimodal and seeks to enable learning to penetrate previously enclosed boundaries. A more agile and adaptive 'vitamin system' of military education involving an 'end-to-end active learning pathway' that prepares officers, NCOs and enlisted personnel for joint and integrated warfare across domains is now required.

The future transformation of Australian military education requires the introduction of blended short courses in professional foundation studies designed to plug the two decade-long gaps that now exist in many military careers. To be fit for purpose in educational readiness, the ADF requires a system of Profession of Arms Foundations courses (PAFC) scaffolded at key points in the decade between commissioning and attendance at the Command and Staff College and again in the decade between post-ACSC and selection for the DSSC. Professional studies short courses need to be organised around joint learning areas that address the anomalies that now exist between *conceptions* of professional knowledge and *competencies* for practice. Combined with the three residential 'calorie' courses of ADFA, ACSC and DSSC, a 'vitamin' model of short professional studies courses would assist in repairing the currently hollow Joint Warfighter Education and Training (JWET) continuum of expertise.¹⁵⁹

A blended PAFC system conducted over four weeks (three weeks online and one week in residence) designed on the CDR short course model is increasingly required to remediate the first '10-year gap' from commissioning to majorequivalent rank. The foundation elements in such a PAFC approach need to include the subjects that receive little or no attention in the years between ADFA and ACSC. These subjects include knowledge of the history and sociology

The future transformation of Australian military education requires the introduction of blended short courses in professional foundation studies designed to plug the two decade-long gaps that now exist in many military careers. of the profession of arms; civil-military relations; military theory; national security, and the concept of national power and whole-of-government effort; and foundations of operations and strategy. PAFC courses should be delivered according to an active adult-learning methodology of using an epistemology of professional knowledge based on Donald Schön's theory for reflective practice (how to apply knowledge).¹⁶⁰

There are three learning objectives involved in a PAFC system. The first objective is to expose officers and noncommissioned officers to a full range of basic knowledge on the evolution and development of the profession of arms. The second is to introduce relevant aspects of war, conflict and the threat or employment of lethal force as the core proficiency of the profession of arms and to do so in a continuous, not an episodic, manner. The third aim is to educate students in key learning areas of interdisciplinary knowledge relevant to the profession of arms in the twenty-first century. The theoretical body of professional military knowledge needs to be presented to ADF personnel as the JWET material or 'cloth' that needs to be fashioned

by reflective practice into problem-solving. In this manner, 'the reflective practitioner acts as a skilled tailor, using the knowledge base of his or her profession as the cloth from which to cut appropriate solutions to fit the requirements of the specific practice situation'.¹⁶¹ This educational approach involves both pedagogy (framing lectures from experts) and andragogy (self-directed and experiential learning following framing lectures).

One of the advantages of a short course system designed to enervate a 'beginning-to-end' JWET system is that it invests in three types of learning that improve ethos and strengthen a culture of professionalism. Individual learning cultivates confident self-directed learners; professional learning encourages reflective practice from knowledge of the profession of arms; and organisational learning reminds participants that they belong to a professional community in which they must situate their cognition.

A PAFC residential component delivered after a preparatory online learning module managed by experienced syndicate directors might be delivered as outlined below.:

Day 1: The Profession of Arms

This would discuss the evolution and ideology of a profession; the concept of officership under arms, ethos, identity and competence; the nineteenth and twentieth century systems of industrial age military professionalism; the general staff system and military organisational change and domains of expert knowledge.

Day 2: The Australian Profession of Arms

The Australian profession of arms and its twentieth century evolution would be discussed in depth from the creation of a professional standing force (1947–75) to the creation of the Australian Defence Force; challenges facing today's post-modern Australian military professional; the aspiration towards creating a 'joint warfare profession' organisational climate and culture; and command, leadership and management differences.

Day 3: The Theory of War and Conflict

This day would consider the nature and character of war (unchanging nature; changing character); the debate on war as culture or sociobiology; the challenge of artificial intelligence (AI); war as art and science; the principles of war; aspects of military thought, theory and doctrine; classical, industrial and post-industrial models of warfare; the levels of war; and the role of technology and expanding warfighting domains.

Day 4: Law and Ethics

The law of armed conflict (LOAC) and regulating the use of force would be examined, including international humanitarian law; rules of engagement, non-combatant status; professional code and culture, as well as the warrior ethic; moral foundations, equity and human rights; cultural factors; the impact of communications and media on ethics; and interagency and joint, interagency and multinational considerations in law and ethics.

Day 5: Civil-Military Relations

The discussion here would focus on the relationship between the military profession and society, theories of civil-military relations (Huntington, Janowitz, Sarkesian, Finer, Feaver, Moskos, Bland), principal-agent and convergence theories; Australian civil-military relations and the Australian Defence Organisation; the British heritage of civil-military relations in Australia and the Hankey-Mountbatten systems; Frederick Shedden and bureaucratic control; the Tange reforms and the organisational system of Australian defence; the role of the diarchy and the First Principles One Defence system.

The above list of subjects and topics across a five-day residential component is not comprehensive. Rather, it is indicative of the generic material for Australian foundational PME courses that will require scaffolding to meet different rank levels of professional maturity and understanding. The aim is to provide a process of PME baselining that eliminates the two decade-long gaps in professional knowledge that have emerged over the past twenty years and to do so in a manner that is practical and capable of being resourced in a holistic system. The emphasis must be on moving from a two-tier (military training–academic education) to a three-tier approach (training, professional studies, academic education). A three-tier system has the advantage of combining incremental changes in curricula in large residential 'carrier group' courses with a fleet of 'nimble cruisers' in the form of flexible, up-to-date short courses conducted at key career points using the human-machine interface of blended learning. Such a continuous system of career-long professional development represents a key lever in building both skills and ethos and would help to improve the weak institutional foundations of the Australian military profession.¹⁶²

Reform Measure 3: Soldier-Scholars and the Professional School Approach to Complement Academe

There is a popular saying among military educators that 'chalk dust must support gun smoke'. One of the reasons for the poor state of Australian PME is the reality that, because of an overreliance on external academic providers, chalk dust has eclipsed gun smoke. This situation has developed because the delivery of military education has never been entirely in the ADF's hands. As a result, there is an unresolved philosophical tension in Australian JPME between academic imperatives to meet university academic standards and governance, on the one hand, and the professional requirements needed to enhance the effectiveness of military service, on the other hand. This situation creates a 'knowledge vacuum' in the large ACSC and DSSC residential courses because there is an institutional inability to define the kind of education that is best suited to the needs of the profession of arms at any given time. A central paradox thus exists in current Australian PME at the intermediate and senior levels of curriculum delivery. It is the paradox that academic university educators are not military specialists and professional military specialists are not academic educators. This leads to a situation in which the ADF pursues 'peacetime efficiency not wartime effectiveness'.¹⁶³

What results from this vacuum is a 'soldier-scholar disequilibrium' that is exacerbated by the dissonance between what is being taught in the schoolroom and what may actually be evolving in professional practice across a fast-moving strategic environment. While curriculum management committees are supposed to deal with this challenge, in practice they are usually mired in bureaucratic process and the minutiae of course administration. In short, such committees are not a solution to resolving the 'knowledge vacuum' between academic theory and professional practice.

At the core of the knowledge vacuum in Australian PME are the cultural differences that exist between soldiers and scholars. As American military educator, Richard Andres notes 'there may not be any two cultures on the planet more different than military and academic'.¹⁶⁴ The military mind is ordered and disciplined while the academic mind is sceptical and questioning, leading some observers to doubt whether 'professors and colonels' can ever be reconciled in a single institution.¹⁶⁵

Many military-academic cultural differences pivot on the dilemma of how to deal with the role of theory in PME. Differences are encapsulated in opposing philosophies of PME as 'professional school expertise' on the one hand and of 'academic university knowledge' on the other.¹⁶⁶ As James Holmes, a leading military educator at the US Naval War College has noted, theory in a professional expertise system is prescriptive and serves as an 'implement for future decision making', whereas in a university theory is more abstract and descriptive. He goes on to write:

Theory for professional schools is prescriptive. It's a toolkit the practitioner uses to analyze tough problems he encounters in the bare-knuckles world of politics and strategy. Theory for university departments is largely descriptive. It's a tool to appraise the nature of nation states, the structure and dynamics of the international system ... It supplies context.¹⁶⁷

A central paradox thus exists ... academic university educators are not military specialists and professional military specialists are not academic educators. For those who favour a greater focus on 'professional school expertise' in PME, content must prevail over context. Theory must serve practice in the same way that society's civil professions such as law, medicine, and divinity operate. The professional expertise school of thought in military education upholds General Sir John Hackett's view that 'the military profession has a distinguishable corpus of specific technical knowledge and doctrine [and] an education pattern adapted to its own specific needs.' A defence or war college has far more in common with a medical or law school than it does with a university. Accordingly, academic input must be fashioned according to focused, applied and relevant professional needs.¹⁶⁸

Today, the professional expertise school of thought is associated with the ideas of such educators as the Oxfordeducated United States Air Force officer, Brigadier General Paula Thornhill, a former Dean of Faculty at the US National War College, and the Canadian military theorist, Colonel Charles S. Oliviero. In 2018, Thornhill noted that the *US National Defense Strategy* had severely criticised American PME as having 'stagnated, focused more on the accomplishment of mandatory credit at the expense of lethality and ingenuity'.¹⁶⁹ She added to this official critique by lamenting the existence of an American PME system that could 'produce neither commanders nor staff officers'. She called for 'quality staff officer education', criticised the prevalence of academic credentialism and the unfocused character of civilian-dominated strategic studies in American PME.¹⁷⁰ In 2022, Oliviera noted that while Western military officers are more highly educated today than ever before, the eclectic collection of degrees often bear little resemblance to the learning required by their actual profession which demands 'war-centred Military Theory'.¹⁷¹ He suggested that the notion of an educational alliance between 'pure and applied' – in the form of a university and a military – requires

fundamental revision in favour of a professional school system. This is because the fluidity of the twenty-first century security environment demands more applied knowledge – albeit with firm academic underpinning – because a military college should be designed to be the equivalent of the professional schools of law, medicine and divinity.¹⁷²

For those who support and promote 'academic university knowledge' as the lynchpin of PME, officer education is better served by promoting a 'purist' concentration on broad-based critical thinking among uniformed officers (emphasising study of fields such as history, the social sciences, international relations, ethics and moral philosophy and country area studies). Today, the academic university knowledge approach in PME is most firmly associated with civilian critics, such as Thomas Ricks and Howard Wiarda, who fear that the 'military mind' has not moved on from Spenser Wilkinson's 1891 declaration that the culture of military institutions is inherently 'opposed to the free movement of intelligence' and in constant danger of 'decay from mental stagnation'.¹⁷³

Evidence suggests that the most effective PME institutions strive to maintain a careful balance between 'pen and sword' by fostering professional mastery and the need for supporting academic knowledge.

In Australian PME, we need to be careful that a 'professional school of expertise' versus an 'academic university knowledge' divide does not become an exercise in comparing apples with oranges. Evidence suggests that the most effective PME institutions strive to maintain a careful balance between 'pen and sword' by fostering professional mastery and the need for supporting academic knowledge. Maintaining this balance is extremely challenging and involves an intimate understanding of different military-academic cultural norms, a situation of mutual respect between professional and academic stakeholders and the presence of empathetic administrators willing and able to provide support to military educators. The difficulty in achieving a professional-academic balance in Australia's circumstances is the absence of military expertise in military education combined with an overemphasis on civilian academic outsourcing.¹⁷⁴

Currently, the ADF simply lacks the balanced military-academic outlook that is found in militaries of comparable size and budget. For example, the Canadian Forces College pursues a philosophy that the professional-academic divide is best managed by civilian educational stakeholders who accept the master principle that 'everything the institution does is military'.¹⁷⁵ At the same time, uniformed professionals are required to accept a parallel principle of 'cross-pollination of educational effort by military educators and academics'. The overall aim is to build an integrated educational approach in which academic knowledge supports, but does not dominate, professional expertise.

A soldier-scholar 'unity compact' builds synergy between all educational stakeholders and helps avoid the cultural extremes of anti-intellectual officers 'who have not improved their ability to think, adapt and innovate' on the one hand, and the production of impractical, scholarly officers who are overly 'flush with idiosyncratic academic irrelevancies' on the other hand.¹⁷⁶

The key in a successful cross-pollination that balances professional expertise and academic knowledge in JPME is to employ an in-house college faculty of military specialists and civilian subject-matter experts to liaise and cooperate

with contracted academic educators. Such faculty specialists are not the same as directing staff – who by definition are generalists and who rotate through their services and the joint force. Directing staff are seldom military educators and even if they demonstrate any talent as teachers their short posting of two or three years precludes any lasting institutional impact.¹⁷⁷ What is required is a cohort of what former COMADC, Air Vice Marshal Stephen Edgeley describes as 'profession of arms specialists.' The latter group are permanent educators with a responsibility to ensure that the design and academic inputs of the curriculum meet professional outcomes and are kept up to date with the art and science of war. This is a major task can only be accomplished by regular research and analysis by military education experts to determine subject-matter relevance and the suitability of learning methodologies.¹⁷⁸

The current Australian PME system tends to be dominated by administrators and generalists who lack research skills and educational expertise and whose focus is on process not product. These deficiencies were starkly exposed in 2016, during a visit to the then Centre for Defence and Strategic Studies (CDSS) by a group of United States National Defense University faculty members. In a meeting, the American educators – all possessing PhDs – asked members of the CDSS staff to outline 'research topics currently being undertaken by staff that are linked to PME teaching'. Since the CDSS possessed no research program or in-house educational cohort, the subsequent exchange was short-lived.¹⁷⁹

If an in-house college faculty does not exist to perform a crucial monitoring, evaluation and research role in PME, then the balance between professional expertise and academic knowledge can be seriously distorted or even be overturned. In the view of this author, this situation has occurred in Australia simply because the ADF has not invested in a body of internal soldier-scholar experts equipped with advanced degrees and educational knowledge to support the professional imperatives of military education. The lack of such a cadre to provide the 'professional school expertise' for a capability effect across the JWET continuum is a profound weakness in Australian PME that carries a gathering risk for the ADF.¹⁸⁰

Combined with an outdated two-tier PME system, the long-standing disequilibrium in the ADF between academic inputs and professional outputs results in hollow areas of professional foundations knowledge. These inadequacies, as previous reports and reviews demonstrate, embrace the policy-strategy-operations trinity, the essentials of military theory from applied history studies, operational art, civil-military relations, political economy and logistics, and aspects of military sociology and ethics. While academic education remains a vital feature of military professional development, the ADF cannot afford to outsource its core knowledge under the guise that universities are superior in educational judgment. It is time to accept the commonsense truth that defence colleges are designed not to produce scholars or researchers, but to develop operators and leaders.¹⁸¹ The stewards of the Australian joint force have a moral responsibility to ensure that in PME, academic context does not eclipse professional content and that what is taught supports but does not supplant the needs of military knowledge.

Reform Measure 4: A Joint Studies Centre for Research and Education

The need for a Joint Studies Centre (or a Defence Research Centre) in the ADF to support education, promote professional knowledge and undertake applied research, as noted earlier, has been called for by several reviews and reports. The explanations for the absence of such a centre revolve around a combination of professional indifference, constant resource constraints and bureaucratic resistance. Yet the price of not possessing a joint 'think tank' or central agency of excellence risks a creeping intellectual devitalisation in which the every-day urgent replaces the long-term important in pursuing professional endeavour.

A joint studies centre is required for several reasons. First, the lack of a joint centre for intellectual excellence inhibits an appreciation of Australian PME as a *gestalt* (an organised whole that is greater than the sum of its parts). A multi-Service think tank would also assist ADC staff in developing the applied cycle of 'research-education-curriculum assessment' that is required to ensure that professional requirements, academic knowledge and teaching methods are unified into an overall learning system and do not operate in silos.

Second, such a centre would provide a useful home for the 'soldier-scholar' cadre that Australia lacks, but so desperately requires, in its PME enterprise. Officers with an intellectual bent need to be encouraged to study and develop the profession of arms. They should not have to retire and join a university or private think tank to pursue the study of war. As Richard Kohn notes 'at its center, war defines the military profession and, therefore, war is what officers

must study'.¹⁸² Lacking any institutional focus for the interdisciplinary study of war, most Australian military professionals are content to be practitioners not action-intellectuals and to leave theoretical investigation of war to civilian scholars and university departments and media pundits. The problem with this situation is that since most academics and pundits have never worn military uniform, their musings on war often have the surreal quality of lifelong celibates engaged in meditations on sex.¹⁸³ An ADF centre of excellence would provide a 'community of practice' environment for the joint force to consider its short, medium and long-term professional development requirements.

Third, a joint centre would be a useful adjunct in pursuing neglected areas of the Australian military enterprise. These areas include trend-analysis in future joint warfare, the spectrum of deterrence, the role of military theory, operational and strategic art, civil-military relations, military sociology and organisational learning. Research into these subjects could then be fed into PME programs - especially through short courses - by means of blended learning methodologies for teaching officers ranging from Generation X through Millennials to Generation Z. A joint studies centre would represent an intellectual investment in the cultivation of relevant professional expertise for the ADF at modest fiscal and personnel overheads - as outlined by the 2012 ASPI Report on PME. As Australia enters the most volatile and dangerous strategic environment it has faced since the end of the Cold War, the logic for such an organisation is compelling.

A joint studies centre is not a revolutionary idea; it seeks to connect education to research to ensure relevant expertise is cultivated.

A joint studies centre is not a revolutionary idea; it seeks to connect education to research to ensure relevant expertise is cultivated. Indeed, it is worth noting that *The Australian Defence College Strategy 2018–2023* calls for military officers to be 'masters of the profession of arms' through a fusion of research and education. The *ADC Strategy* defines mastery as a 'strategic focal area' from which to approach the quest for cross-domain and joint warfighting expertise.¹⁸⁴ Further, it notes the close relationship between PME and research activity:

Strategic direction for education and training can be better informed by research and focusing on future Defence capability needs. There is a linkage from lessons to evolution and innovation in education, training, and research.¹⁸⁵

The ADC's 2019 *Australian Joint Professional Military Educational Continuum* reinforces mastery of the profession of arms as its value proposition in the form of the 'intellectual edge'. The document highlights that' research-led education and training' supports and drives ongoing adaptation, innovation and adjustment of the continuum and curricula.¹⁸⁶

Yet the difficulty with developing 'research-led education and training' is that rhetoric does not match reality. Currently, CDR is akin to a Potemkin village or, in Australian terms, resembles Slim Dusty's 'pub with no beer'. It is too small (staffed by two individuals) to provide support to Australian PME, let alone to foster a fusion between research and military education imperatives. What is required in the future is a larger, adequately staffed joint studies centre to reinforce and foster the intellectual linkages between military education and the profession of arms. Yet, it remains to be seen whether the ADF has the will and imagination to pursue theoretical excellence for joint warfare by creating such an organisation.

Conclusion

The philosopher, Eric Hoffer once wrote that 'the central task of education is to implant a will and facility for learning; it should produce not learned but learning people'.¹⁸⁷ Over the past quarter of a century, Australian military education has faltered in this core task and a hollow PME continuum now exists replete with knowledge deficiencies. A welter of reviews and reports have exposed these weaknesses and vulnerabilities and have suggested solutions at relatively modest fiscal cost. Yet little change has occurred with rhetoric replacing reality, academic context eclipsing professional content and university outsourcing replacing institutional effort and outcomes. There has been vincible ignorance at work in the ADF through an inability, or unwillingness, to grasp a central and inarguable truth: The health of the Australian profession of arms is intimately connected to the strength of the military education system. Put simply professional knowledge from education nurtures organisational effectiveness. In many respects, the ADF's attitude towards PME resembles the famous 'Ship of Fools' allegory in Plato's *Republic*, where the philosopher talks about the tendency of routine governance processes to inevitably prevail in any system not based on expert knowledge.¹⁸⁸

With a few exceptions, Australia possesses an analogue educational system operating in a digital age. The current Australian PME system is a legacy phenomenon built on an obsolete two tier-approach of academic education and military training. Other legacy features of current ADF PME include an overdependence on three large and episodic twentieth-century residential course models; an over-reliance on academic providers to sustain the PME system; and a lack of an ADF cadre of expert military educators to ensure that academic inputs support professional outcomes. These features alongside the absence of an effective career-long military 'end-to-end active learning' continuum have long been recognised by various PME reports and reviews as contributing to two unacceptable '10-year gaps' in professional development.

The need today is to introduce a three tier-system that produces the connective tissue between education and training by providing intermediate professional foundation studies. And, if the ADF is to be successful as a professional joint force into the 2030s, it must commence a long overdue and systematic reform effort to empower its JWET continuum by exploiting the digital revolution in education. Digital technology and new learning methodologies permit the addition of flexible, blended short courses to supplement traditional residential courses and promise to breathe new life into the philosophy of a 'learning profession'. Of all military capabilities, education is the least expensive, yet has the greatest impact, in that it contributes to the array of human skills that are often the difference in war between success and failure. As Clausewitz reminds us, war is more akin to 'a game of cards' than to the neat, geometric movements beloved of technologists.¹⁸⁹

Given that the problems in the ADF's system of PME are identified, well-known and yet long neglected, their reform is a matter of leadership will and command intent. Development of the intellectual capital of Australian members of the profession of arms is a moral imperative that cannot be shunned in the deteriorating strategic environment of the 2020s. Senior officers who are tempted to remain indifferent to the crisis in Australian military education are shortsighted and expose the joint force to the prospect of future operational failure. They would do well to remember the wise words of the nineteenth century British soldier and author, Lieutenant General Sir William Butler:

the nation that will insist on drawing a broad line of demarcation between the fighting man and the thinking man is liable to find its fighting done by fools and its thinking done by cowards.¹⁹⁰

Some Recommendations

The Australian Defence Force needs to understand the connection between the health of the profession of arms and the efficacy of its military education system.

The weak foundations of Australian military professionalism would be measurably improved by a reformed PME system with a focus on professional outcomes over academic credentials. Every report and review on Australian PME since 2000 has emphasised how education improves professionalism.

The ADF needs to move from an episodic two-tier to a three-tier system of continuous PME to meet contemporary and future requirements.

The current two-tier system that focuses on academic education and military training and which favours large residential courses is inadequate for twenty-first-century purposes. The ADF requires a holistic, three-tier *gestalt* system embracing academic education, professional foundation studies and military training. The new system needs to be conceived as a career-long learning continuum that makes far better use of digital technology and employs short, blended courses to maximum effect. The content of the large residential courses, particularly at the Australian War College needs to be linked to up-to-date short courses both before and after attendance at the ACSC.

The ADF needs to accept the profession of arms lacks a single common body of academic knowledge that meets all of its PME needs.

Unlike law, medicine and divinity, the military profession has no common academic corpus for all of its officers. Academic military education is vital in providing the officer corps with general critical thinking and analytical skills. Yet, the joint force must understand that the focus of academic education is mainly on the *context* surrounding the military profession, not on the *content* of military knowledge. The ADF needs to invest in interdisciplinary 'professional school expertise' as well as 'academic university knowledge' in its PME syllabi.

The ADF needs to invest in a soldier-scholar cadre to ensure control of its core professional knowledge.

The ADF cannot outsource core knowledge of war, strategy and operations to civilian providers. The Australian military profession needs to take ownership of its own professional knowledge by insisting on a proper alignment between the three learning areas: liberal academic education, specialised professional development and the needs of expert training. Professional content must always accompany academic context. To ensure the development and ownership of its own professional knowledge the joint force must develop a small but effective cadre of military specialists and educators with advanced research degrees that can ensure the vitality of professional knowledge in PME. Far better use could also be made of retired officers with intellectual skills and professional experience. Any soldier-scholar cadre needs to work effectively with academic university contractors to help fashion a holistic PME system that enhances military knowledge and professionalism.

The ADF should introduce a series of short and blended PAFC to remediate the two '10-year gaps' in its PME.

Professional foundation studies, as the linkage between academic education and military training, need to be introduced into the ADF. This can be accomplished by means of a PAFC program aimed at remediating intellectual gaps in professional knowledge between commissioning and major-rank equivalent and beyond. Such a series of short courses would assist in strengthening the institutional foundations of the Australian profession of arms. They would have the effect of improving the state of baseline knowledge in the officer corps before candidates reach attendance at ACSC. A short course program would also foster the ADC's goal of an 'end-to-end' military education continuum in the inevitable transformation of PME away from 'Gutenberg to Google' – that is from an industrial-age mass 'calorie' model of education towards an information-age targeted 'vitamin' model of education.

The ADF should consider the creation of a small but effective Joint Studies Centre to foster professional research and to support PME in the joint force.

An ADF centre of excellence would provide a valuable 'community of practice' environment for the joint force to consider its short, medium and long-term professional development requirements. Such a centre might provide a home for the soldier-scholar cadre recommended earlier. A Joint Studies Centre that focuses on both applied research and education would help lift the profile of the Australian profession of arms. Areas of activity should include trend-analysis in future warfare, investigating deterrence, and following new developments in operational and strategic art. A concentration on neglected areas such as civil-military relations, military sociology, and organisational learning would be an asset. Research into these subjects could be fed into the entire PME continuum and assist in keeping it both relevant and up to date.

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- 6 Professor Ian Zimmer and Professor Bruce McKern, *A Review into Military Postgraduate Education* (Brisbane: University of Queensland, December 2000).
- 7 Zimmer and McKern, A Review into Military Postgraduate Education, v, 1–3, 4.
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- 9 Zimmer and McKern, A Review into Military Postgraduate Education, viii.
- 10 Zimmer and McKern, A Review into Military Postgraduate Education, 25 17–19.
- 11 Zimmer and McKern, *A Review into Military Postgraduate Education*, 27–28. MBA stands for Master of Business Administration; M Def Studies for Master of Military Defence Studies and M Info Mgmt stands for Master of Information Management.
- 12 Zimmer and McKern, A Review into Military Postgraduate Education, 33, 35; Steven Schwartz, Degree Inflation: Undermining the Value of Higher Education, Analysis Paper 48 (Sydney: CSIS Education Program, Centre for Independent Studies, May 2023), 3. Academic credentialism in Australia has since become a major problem. Between 2001 and 2019 the number of Master's degrees tripled from 31,367 to 109,276. In the ADF, it is not uncommon to encounter an officer with two or three MA degrees. More broadly, it is now possible to earn a Master's degree in Circus Studies at Swinburne University of Technology.
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- 14 Zimmer and McKern, *A Review into Military Postgraduate Education*, 33, 35–36. Some 50 per cent of the courses were to be contracted out.
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- 37 Evans, From the Long Peace to the Long War, 16; John W. Masland and Laurence I. Radway, Soldiers and Scholars: Military Education and National Policy (Princeton, NJ: Princeton University Press, 1957) 51. Training has an external orientation on skills of implementation that are open to clear measurement. In contrast, education has a more internal orientation and is about purpose, judgment, and rectitude – qualities that are less open to measurement.
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About the Author



Professor Michael Evans

Professor Michael Evans is the General Sir Francis Hassett Chair of Military Studies at the Australian Defence College, and a professor in the School of Humanities and Social Sciences at Deakin University. He is a former Head of the Australian Army's Land Warfare Studies Centre (2002–06) and has served as an adjunct senior fellow at the New Zealand Defence College since 2012.

Born in Wales, Professor Evans is a graduate of the University of Rhodesia (BA Hons First Class Honours), the University of London (MA War Studies) and The University of Western Australia (PhD). He has been a Sir Alfred Beit Fellow in the Department of War Studies at King's College, London (KCL); a J. W. Jagger Scholar at the University of Cape Town; and has held visiting fellowships at the University of York in England and at the Australian Defence Force Academy, University of New South Wales. He is a recipient of the US Naval War College Foundation's Hugh G. Nott Award and the US Army War College Foundation's Elihu Root Prize.

Professor Evans saw military service in the Rhodesian security forces and was later a regular officer in the post-civil war Zimbabwe National Army, where he worked closely with the British Army in the integration of two rival guerrilla armies into a conventional land force.

He is a member of the International Institute for Strategic Studies (IISS), serves on the international editorial boards of the *Journal of Strategic Studies; Small Wars and Insurgencies* and *Defence and Security Analysis.* He was foundation editor of the revived *Australian Army Journal* (2003–06) and is a member of the editorial board of the *Australian Journal of Defence and Strategic Studies.*

Professor Evans is extensively published in Australia and overseas, particularly in the United States, and was the lead author of the Australian Army's LWD 3-0-1, *Counterinsurgency* (December 2009) and a consultant on the Army's 2014 capstone doctrine, LWD 1, *The Fundamentals of Land Power*. He is responsible for the design and delivery of the Australian Defence College's Apollo, Strategos and Advanced Military Studies short course programs for professional development. Vincible ignorance is an accurate description of the ADF's attitude towards PME during the first two decades of the twenty-first century. These years saw the development of an institutional mindset that fostered dependence over independence; credentialism over creativity; academic stricture over professional knowledge; and superficial understanding over serious study.

This study by Professor Michael Evans, the General Sir Francis Hassett Chair of Military Studies at the Australian Defence College, examines the state of Australian professional military education (PME) as we approach the mid-2020s. The paper traces the development of PME over the past two decades and concludes that the present system is deeply flawed and will not meet the professional needs of the Australian Defence Force (ADF) into the 2030s. Despite reviews and reports between 2000 and 2013 highlighting a critical need for PME reform, little has been done to remediate the system.

Unlike previous reviews of Australian military education, this essay firmly situates the need for educational reform with the requirement for professional expertise rather than the logic of academic attainment.

At the heart of the ADF's weakness in PME is an over reliance on a two-tier twentiethcentury philosophy of education and training based on large, but episodic, residential courses disconnected from the requirements of career-long learning. Instead, Evans argues, Australian PME must be viewed as a system composed of three layers of linked learning: academic education (provided by scholars), professional foundation studies (provided by scholars and military specialists), and military training (provided by military experts). Accordingly, this study recommends a form of educational shock therapy by proposing the introduction into the joint professional military education continuum of 'just-in-time' blended and short (remote-residential) Profession of Arms Foundation Courses (PAFC).

The study concludes that the overall aim of such reforms, if enacted, must be to ensure the ADF joint force, in educational requirements at least, becomes 'fully fit for purpose' to meet the security challenges of the 2030s and beyond.



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