

Executive summary: Submission 1 (Building Adaptive Capacity)

The ADF needs to improve the quality and focus of its intellectual capital if it is to be effective in the increasingly complex strategic and operational environment of the future. This submission is the first of three submissions that address interrelated issues in ADF personnel (and unit) capability development;

- Submission 1 – Building Adaptive Capacity (in 3 Parts)
- Submission 2 – Military Academic Faculty
- Submission 3 – Military sociology, intellectual capital and Defence capability

A strategy for bringing about the desired capability development is to build *adaptive capacity* within the ADF's major centres of professional education. This will involve:

- merging individual and organisational learning strategies;
- refocusing learning activities away from a training-model approach towards an educational-model, in particular by building learning activities around action-learning/real-life-problem-solving; and
- moving beyond the rhetoric of '*how to think rather than what to think*' by learning how to think and being given the opportunity to apply thinking skills in critical and creative ways.

Complimentary reform within the Defence College is needed with respect to:

- addressing the utility of Directing Staff, and the excessive turnover among senior leaders by establishing a permanent and stable academic faculty.

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Part 1: Adaptive Capacity and Dynamic Capabilities

There are three main sets of assets involved in military capability. The most visible of these is **structural capital**, involving tangible assets ranging from *weapons systems* to the *national industrial base*. However, although the development and management of these big ticket items consumes much time, money and attracts public and political scrutiny, they are no more important to true capability than the elements of the other two asset sets, intellectual capital and social capital (Jans with Schmidtchen 2002).

An organisation's **intellectual capital** is the thinking power it uses in both routine and novel situations. Intellectual capital has always been important to modern military organisations but, in the 'information age', it is more important than ever. Modern conflict, with its immense cost and public scrutiny, requires guile, diplomacy and imagination, so commanders and their staffs have to both be smart and have access to 'smart' systems and decision support tools. And the organisation's **social capital**, by analogy with structural and intellectual capital, refers to features of social organisation such as networks, norms, and social trust: qualities that facilitate coordination and cooperation for mutual benefit and developing the 'I' into the 'we'.

This submission is concerned with the development of intellectual capital and to a lesser degree social capital. It argues Defence needs to build an appropriate adaptive capacity (defined below) by merging individual and collective learning objectives and individual and collective learning activities. As far as is possible, Defence needs to merge the process of solving professional problems with the process of professional learning.

As organisations need to assimilate knowledge and construct new knowledge in order to continuously adapt and innovate, the organisation needs the capacity to learn and change (Davenport and Thomas 2002; Ghosh 2004). To borrow a maxim from General David Petraeus, knowing '*how to think, rather than what to think*' is as important for an organisation as it is for an individual (Coll 2008). Paradoxically, while 'learning' and the concept of the 'learning organisation' are concepts that are very much in vogue, it is not valid however to assume that 'learning' is inherently good. When the method by which learning is conducted is flawed or when past learned practices become inappropriate due to changed circumstances, learning can contribute to organisational stasis and misdirection.

The concept of learning how-to-think-rather-than-what-to-think is consistent with the notion of creating **adaptive capacity**, as opposed to reactive adaptation. Adaptive capacity, amongst its many advantages, makes the pursuit of the 'unknown' and the 'ambiguous' an advantage, rather than a problem. It does this by developing a system of learning which expands the individual capabilities of the various actors involved whilst simultaneously developing creative solutions to what are often 'wicked problems'.

With its command over its learning institutions as well as over its operational and staff organisations, Defence is very well placed to effect this merger. Our submission begins with an outline of the concept of adaptive capacity. We then illustrate how this can be

brought about by reference to innovative approaches to learning at the Australian Defence College and the Dutch Military Academy.

Organisational Context: From Rhetoric to Reality

The convergence of the three elements of capability are clearly seen in terms of the technological, organisational, doctrinal, social, and cultural implications of the ‘network-centric force’ envisioned by *Force 2020* (Defence 2006). It requires the ADO to reconcile a command and control culture with dispersed network-based applications (Schmidtchen 2007). Connectivity embraced naïvely, in the hope that commanders will see all before them, has the distinct risk that psychological and sociological implications will be overlooked or treated as something that ‘will fix itself’ as things develop.

In contrast, some have argued that the ADO needs an arguably qualitative shift in its commitment to the human dimension. For example, Schmidtchen has pointed out that there is a low level of awareness of the social logical and cultural implications and a number of ‘questionable productivity benefits’ in the development of organisational change philosophies that contribute to investments (viz., *Renewal*) (Schmidtchen: 178). Similarly, the ‘educational training’ approach¹ to developing the primarily cognitive, individual and collective capability that Defence itself sees as necessary in a complex environment is highly problematic.

Arguably, this approach acts largely to reinforce status quo behaviours counter productive to desired change (Thomas 2005; Thomas 2008). Effective individual and organisational (collective) learning will both require suitable teaching practices and the design of a suitable learning environment.

Part 2 of this submission outlines a strategy to build Adaptive Capacity in Defence education

¹ The pedagogical difficulties and true nature of Defence *learning culture* can be understood fully from the following comment: “*We also consider it is time to move ... away from an exclusively compliance and process driven approach* [emphasis added] *to a true values-based [unspecified] approach*” (Podger 2006: pg v, para 10).

Part 2: Submission 1 (Building Adaptive Capacity)

Part 1 outlined capability in terms of three assets: structural, intellectual and social capital and identified the utility of Adaptive Capacity for creative change solutions.

Change through Adaptive Capacity

Organizational change is typically adaptive involving cost cutting and rationalization (DER). Another approach sees change as a long-term political and social process. This approach fits with the strategy of building *adaptive capacity*, which refers to the ability to change existing ‘*routines*’ – the processes, procedures, and habits that drive an organisation’s activity (Berkhout, Hertin et al. 2006). While the concept is characterized by “ambiguity and complexity”, being ‘difficult to manage’ and with payoffs that are ‘rarely immediate’ (Staber and Sydow 2002: 409), its utility is evident when contrasted to ‘*reactive*’ adaptation – (see Table 1).

Table 1: Adaptation and Adaptive Capacity (Source: Staber and Sydow, 2002)		
	Adaptation	Adaptive Capacity
Environment:		
Future State	Known or predictable	Unknown
Organisation relationship	Reactive	Interactive
Organisation objective	Exploitation via best fit; avoid slack	Balancing exploration and exploitation, use of slack resources, exploiting ambiguity
Organisation capabilities	Given, incremental and path dependent change	Temporary or dynamic, potential rigidities acknowledged
Learning	Single-loop learning (process improvement)	All kinds including double-loop learning
Structures	Lean	Open
Organisation theories (examples)	Contingency theory, resource dependence, institutional economics	New systems theory, structuration theory, complexity theory, evolutionary theory

Adaptive capacity in the ADF gains greater practical utility when linked to *dynamic capabilities*, distinguished from static ‘operational capability’ (Teece 2007). Dynamic capabilities support an organisation’s ability to continuously create, extend, upgrade, protect and thus keep the organization’s unique tangible and intangible asset base relevant. These capabilities are most relevant in an environment characterized by being ‘fully exposed to rapid technological change’ (Teece 2007: 1320).

Building Adaptive Capacity: Illustrated using the ACSC program

The ACSC course is a highly structured 12-month study period, with a student body of some 160 officers that includes a strong regional representation (ADF(b) 2008). Students attending generally possess rich operational experience and driving ambition.

The curriculum, built around a heavily-prescribed course specification and a strong explicit focus on the ‘acquisition of professional skills and knowledge for future careers’ (ADC(a) 2007: 6, para 23.e), encourages a subject-centred, content focus and ‘expert’ driven lecture bias. The staffing model at ADC compounds the educational disadvantages of the curricular approach. Directing Staff and senior officers are essentially generalists, chosen on the basis of their operational experience and leadership. While there are advantages, the consequence is limited ability to make connections between professional activities and related disciplines such as law, politics, psychology, sociology, and the like. Course development too is problematic with a passing parade of senior officers. For example, since the ACSC’s inception in 2000, it has had seven Commandants, seven DOS-N, seven DOS-L, and six DOS-A.

These features collectively reinforce an approach to learning that is individual-centred, assessment-oriented and strongly pragmatic. Within the student body, there is a general indifference to ‘theory’, the latter being seen as somewhat removed from ‘real’ life and not of much help in terms of enhancing an individual’s career.

Beginning in 2006 and continuing into 2008, the HRM elective, part of a set of electives presented by UNSW on a contractual arrangement, deliberately took a different approach to learning. This approach was characterised by three main features:

- Making active participation central to the learning process (Ramsden 1992);
- Emphasising the principle ‘there is nothing as practical as a good theory’ (a maxim attributed to the behavioural scientist, Kurt Lewin); and
- Building the curriculum around student pursuit of solutions to current and important organisational issues/problems.

The subject was based on a problem and team-based learning approach. Using this approach, the program of learning activities moved students back and forth between rich new experiences (lectures and tutorials) and deep, meaningful dialogue (in small groups and as a class). The interaction symbolized a rich environment for active learning (Grabinger and Dunlap 2002); it arguably also helped *diffusion* from self-reflection and group interaction as much as from formal learning activities (Brunner 1994; Goldberg 2001).

The Defence Senior Executive provided realistic problems, and along with principal desk officers, Department Heads attended formal presentations on selected topics at course completion. From a learner’s perspective, the context was effectively one close to the workplace situation where any learning would be employed. Three principles are key – a *challenging task*, organisational (and academic) *support* and *accountability* to senior managers (CCL 1998). As well, the positive response by Defence management to commit resources and time to ACSC coincided with interest by students to engage with senior leaders – in military parlance, it was getting valuable ‘face time’ with senior managers for future career benefit. In sum, the approach was a win-win outcome for all.

While the approach received strong endorsement in post course evaluations (ADC(a) 2007), the relevant issue in terms of organisational learning is the successful diffusion of knowledge into the wider organisation. Effectively, synthesized knowledge received the direct attention of senior leaders and principal staff officers who were able to incorporate recommendations into emerging policy.

This is an illustration of *adaptive capacity* – the ability to change routines and habits and enable knowledge transfer – in action. Just as importantly, this approach stepped outside the questionable formula of requiring senior leaders to actively plan and lead organisational change. Implemented Defence wide, adaptive capacity has the potential to make change a distributed, organisational constant, rather than a top-down reactive process. While individual learning was not the priority, results and feedback also provide evidence of deep learning outcomes¹ and an on-going commitment to education.²

These two benefits are in contrast with the prevailing ADO learning culture (Podger, Harris et al. 2006) where learning is characterized as: encoding restrictions on what can be learned; controlled and controlling; and supportive of a broad-brush conceptual approach that many acknowledge as ‘a mile wide but inch-deep’.

The essential point is that adaptive capacity can achieve longer-term organizational benefit, as well as generate learning experience that go far beyond the current instrumental objective of satisfying requirements for professional and academic award.

¹ People learned particular kinds of knowledge and skill better and more deeply as they had to use it in the performance of their work Moore, D. T. (2004). "Curriculum at work: An educational perspective on the workplace as a learning environment." *Journal of Workplace Learning* **16**(6): 325-340.

² People learned to value experience. In contrast, an instrumental view of education operates as a means to social control (see Foucault, M. (1980). *Power/Knowledge: Selected Interviews and Other Writings 1972-1977*. New York, Pantheon Books) and teaches students not to value the subjective and cultural knowledge they each have.

Part 3: Submission 1 (Building Adaptive Capacity)

Part 1 outlined military capability and the utility of Adaptive Capacity for creative solutions, while Part 2 explained change through Adaptive capacity and the potential creation of *dynamic capabilities*, illustrated through the ACSC program.

Part 3 provides some concluding remarks, plus a selected bibliography.

Conclusion

In closing, instead of periodic exhortations for uncertain renewal and adaptation, the opportunity exists in Defence to create *adaptive capacity* by adopting suitable structures and teaching pedagogies. This capacity, led suitably (by an academic Faculty), should generate a *dynamic capability* that arguably needs to be a widely endorsed attribute in ADF capability development. In this particular example, effective organisational learning is central to the ADO realising its envisioned network-centric force and to enabling commanders to know ‘how to think’ as opposed to ‘what to think’.

There are a number of important implications from our argument.

Firstly, fostering effective learning at both individual and organisational levels is a conceptually different challenge to training. A failure to grasp this point risks perpetuating the status quo.

Secondly, individual learning and organisational change are not separate, secondary objectives to operational capability. The reality is that the ACSC is an ideal place to experiment and develop the strategy of *adaptive capacity*, which can provide an operationally overcommitted ADO much needed organisational slack beyond the current practice of extracting senior staff from educational establishments to meet operational manning needs. Rather, the latent intellectual (and knowing) resource in the ACSC student body can and should be turned to generate a dynamic capability for organisational, even regional security, advantage.

Finally, even if the pay-offs are not clear, by encouraging both forms of learning (simple and generative) and associated change the subsequent generative change capacity will be valuable for sustained success in a dynamic and complex environment.

The pedagogical model used at the Defence College should reflect the creation of adaptive capacity and dynamic capability. In addition, complimentary reform within the Defence College is needed with respect to the utility and tenure of the Directing Staff, the excessive churn among senior leaders, and the establishment of a permanent and stable academic faculty.

End submission 1; please note there are two further connected submissions

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