

Effects-based Education: From Cadet to the Commander-in-Chief

Defence Education and Research in a New Age

Although the current scholastic approach remains vital, the didactic challenge for defence educators today is far greater than just passing on insight and experience. A new balance between academic learning and experiential learning, so important to the officer, is needed. It could be provided by a future defence academy that is built around three 'institutes' representing command, learning and security. Here, defence educators could stimulate a commitment to life-long learning and contribute to the longer-term objective of creating a cadre of officer-scholars with doctoral degrees.

*Prof. dr. S.J. Lindley-French**

In an age in which defence budgets are under ever increasing pressure, in which the military task-list expands exponentially in line with the complexity of operations, whilst the number of boots shrinks and in which defence inflation is running at between 8 and 10 percent per annum defence educator/academics need to re-think. Indeed, the mindset of educators, the approach to education and supporting research has simply not transformed anything like as fast as the operational experience and thus the needs of the services. At the very least there needs to be a much clearer understanding of the role of defence educators, their mission and method.

Indeed, definition herein is vital because in defence education there are educators who are not academics and academics who are not educators. Too often that distinction acts to prevent the two credibilities that defence education is built on, namely the academic

credibility of defence educators in the classroom, and defence credibility of academics. Make no mistake: defence education is an enabler of the military-security effect – nothing more, nothing less – and a new partnership between the military and academics is needed if effects-based education is to be relevant to the complex challenges military personnel face. Therefore, the challenge is to answer three simple but profound questions. First, what kind of officer should be the product of defence education in ten to fifteen years time? Second, what is the role of defence education and research therein? And third, how should defence academies be organised to that end?

The purpose of defence education and research is to enhance effect by supporting the forces to achieve mission success at an acceptable level of both risk and cost by shaping people better able to both understand the operational environment and act within it. Everything educators do therefore must pass a criterion: defence research must be demonstrably both actionable and teachable. Defence educators must constantly strive therefore for

* Julian Lindley-French is Professor of Military Operational Science at the Netherlands Defence Academy and Senior Associate Fellow of the Defence Academy of the United Kingdom.

excellence through the provision of education and support relevant to the needs of the young men and women that are sent and will be sent into dangerous places. It is all about them.

Consequently, gone are the days when defence academics could insist upon a version of academic freedom that permits the indulgence of researching and teaching what academics like and when academics like it. Of course, educators must propose topics to the service chiefs who do not themselves always understand what they want. However, it is ultimately then up to them to decide what is researched and what taught even if thereafter the right to academic freedom must be respected as necessary to drive the effect forward having been so tasked.

The longer-term objective is to create a cadre of officer-scholars with doctoral degrees

There are three other areas germane to the mission. First, why the accreditation of defence academies, courses and, ultimately, research matters. Second, why the creation of a cadre of officer-scholars will be vital to future effectiveness of armed forces. In other words, the who, the why and the what of the relationship between the military officer and academic research. Third, what is the likely relationship between the future of defence education and research and the future role of defence academies.

Why Accreditation Matters

BAMA (Bachelor and Masters degrees) accreditation is at the centre of the future mission of defence academies. Unfortunately, many senior military officers the world over do not really understand why. This is not surprising given the rightful focus on current operations. However, this results in a very real problem for modern defence academies – where do they belong in the order of effect? The extent of this problem is demonstrated by the mismatch between the personnel policies of the services

and the needs and mission of most defence academies. Equally, many of the civilian academics who serve the military do not themselves really understand or can explain how and why accreditation is relevant to the needs of the armed forces (as opposed to being relevant to their own standing in their respective academic communities).

The demonstrable benefit of accreditation is in fact simple. First, the accreditation of scientific education at BA level is a vital tool in attracting bright cadets in what is always a competitive labour market for the intellectually gifted. Armed forces need ever greater numbers of ever more intelligent people in their officer corps who are able not only to do, but to think *and* do better. They must have something to aim for from Day One which motivates them to join and to stay.

Second, research accreditation is vital because it validates the research that defence academics must undertake to support the intellectual effect implicit in the planning and performance of militaries in complex environments. Rigour, validation and method matter in proving the case as part of a research strategy that must be designed from the outset to be relevant to the needs of the armed forces and systematic in its design and application. That is the reason for MA accreditation, not in itself university status.

Twin-Track Approach

However, education and research accreditation are not the same things and should not be linked as a matter of principle. That is why NLDA has adopted a twin-track approach. When NLDA achieves BA accreditation next year it will then be up to the Services to decide if and when the Academy aims for the research accreditation goal. However, it must be based on an assessment of *their* needs. Whilst important, the status of academics in defence academies must not be the driving factor. Make no mistake, such accreditation will take time, effort, money and a new partnership between academia and the armed forces that is as yet only at its most primitive in most European countries. Moreover, MA accreditation, be it of

either a course or associated research, is not an extension of BA accreditation. Rather, such accreditation requires a thorough understanding of the specific strengths and weaknesses of a faculty and the specific questions that will be posed by a visitation from the accreditors. Only then can a faculty-wide plan be created that can work up the necessary structures, personnel and performance that what is a very demanding quality control level will demand.

Equally, accreditation must not be seen as the preservation of an academic tradition for academia's sake in any one country. Indeed, if there is one field of activity where international education and research benchmarking matters it is defence education. Why? First, because most allies will rarely if ever deploy in the absence of forces and partners. Second, because small militaries need big thinkers for sustained effect. Again, if teachable and actionable is and must be the mantra a very broad view of the world is needed, its doings and those of others given the dangerous reality of the future careers cadets have chosen and the complex relationships they must forge with partners at all levels of command.

At the very least the relationship between accreditation, education and research excellence, and the link with the needs of the services, must be far better explained to all concerned by those responsible if a partnership is to be properly established between the military and defence academics that does not as yet exist in most countries. In other words a vision is needed. At the very least there needs to be much more focus on a direct interface between operations, research and education. Failure to pursue such a partnership will over time emaciate the role of defence academics to the profound disadvantage of all.

The Need for Continuous Learning

Defence education is not just about cadets – it is about effective continuous learning. On a recent trip to Afghanistan discussions took place between this author and officers at all

FOTO: MARTIN ROEMERS/HOLLANDESE HOOGTE



Accreditation is at the centre of the future mission of defence academies

levels of command from several countries about their preparedness for the mission prior to deployment. The answers received were sobering. Few officers were prepared for the complex challenges posed by complex missions, especially when it came to dealing with civilians on all sides of a very complex equation therein. There is still a culture in too many militaries that takes the view that learning on the job is the crucial element of learning itself, seemingly based on a conviction that generalists can do everything. In complex environments such a simplistic concept is dangerous.

Rather, this is an age in which continuous learning is a vital operational need, in which questioning the conventional is not only a fact of life, but a must for people at all levels of command because access to information and its use is the platform for mission success. Therein lies the opportunity for defence educators if they can grasp it. Educators do learning, they know how to question and understand the generation and dissemination of information. That, after all, is the only justification for defence educators and the burden they impose on the defence budget and the national taxpayer. However, if educators are to perform the combat support service they must not only know about the context of operations in such

places as Afghanistan (now, the past and in the future), they also must be prepared to get out there and research the challenges that the people they support face every day. If there is one area of professional life demanding of applied research it is the armed forces.

Cadre of Officer-Scholars

Therefore, Military Operational Art and Science (MOAS) at NLDA is beginning a journey to create a unique relationship between practical academics and officers with operational experience. To that end, all research must appear in the classroom and any research must be relevant and contemporary to the theatre of operations. It is not easy. The majority of military officers are not academics. They did not sign up to be academics. That is why MOAS has initiated operational consultancy. Indeed, where academia meets the military the research output is consultancy with the aim of generating creative effect. Over-loading officers with an excessive methodological rigour or benchmarking progress by insisting that they publish in little read dusty peer reviewed tomes simply condemns the thinking officer to a failure that he or she does not deserve.

The pioneer project is a consultancy project on behalf of the Royal Netherlands Navy, in particular the Royal Netherlands Marine Corps, on the future of Riverine Operations. First, because it is needed. Second, because the project establishes a precedent for practical and operationally relevant research by the Netherlands Defence Academy in direct support of a future concept of operations. The research involves and requires basic but robust disciplines of building and assessing evidence and thereafter offering options based on the simple but vital method of letting the evidence tell the story. All elements of research are present; hypothesis crafting, testing, validation, re-testing and reporting.

The longer-term objective is to create a cadre of officer-scholars with doctoral degrees who sit at the nexus between operational experience and creative knowledge. Careers have traditionally been carved out on operations. That will not

alone be sufficient in the future. There is a pressing need for people who combine both operational experience with high-level knowledge, especially for small militaries engaged on long operations in big places. US General David Petraeus penned a famous article entitled 'To PhD or not to PhD'. In it Petraeus stressed the value of a cadre of officers who sit at the interface of operations, analysis and reflection. Able to learn from their experiences and yet armed also with full research capacity at a high level of rigour. This is to insure lessons-learned exercises become much more than super operational logs that too often gather dust on classified, but forgotten shelves in the central archives. Be it the writing of doctrine, or the preparation of the future force, be it reinforcing the link between the private soldier and the commander-in-chief, or understanding planning and policy in complex coalition environments such officers will be vital in maintaining a planning and command continuum in complex environments and answering that most salient of contemporary challenges; what to plan for?

The Future of Defence Academies

Everything defence educators do must be about effect on the ground, in the air, at sea and at *every* level of command. Educators need to eat, sleep and breathe that challenge. In an ideal world the marriage of academia with defence would lead to a very different kind of defence academy. Defence academies would become less cadet and officer factories and more a kind of defence information super-highway, a vision shared with a colleague at the United Kingdom Defence Academy, David McOwat.

The current scholastic approach of course remains vital. There must after all be something to learn and a mechanism for passing on both insight and experience. However, the didactic challenge is far greater today given that many of the comfortable assumptions long held about identity and culture can no longer be assumed if academies are to maximise effect on limited human and financial resources in complex environments over



FOTO USAF, JOHN COLLINS

Continuous learning is a vital operational need

time and distance. For defence educators the mission is not simply to educate *per se*, but to create an intellectual home in which culture, identity and principles are shared and thus form the very basis of that all important future *esprit de corps*. Equally, the military trainers, especially those that come from the ranks need to understand that an academy is more than a four year boot camp. There must be room to learn, to take risk, even to fail for creating the safe environment for failure is the essence of successful learning.

Commitment to Life-Long Learning

In effect defence educators must not only seek to help shape the world view of the individuals under their charge, but must also generate a commitment to life-long learning that can enable them to observe, adapt, lead and re-assess as a matter of course. Indeed, leadership at the junior leader level will only emerge from officers who both know a lot and know how to think a lot. At the cadet level whilst undoubtedly a challenge such an objective is not impos-

sible. The young brain is after all the most open. However, such a vision also presents a didactic challenge. Indeed, whilst the baby boomer generation that is coming to (and passing) maturity was focussed on facts and the written word, today's young people are much more attuned to ideas and images and that needs to be understood.

That is why a new balance between academic learning and experiential learning is so important for the officer. However, to achieve such an objective the command and promotion culture in armed forces will also have to change. Too often courses are simply seen as badges of merit, boxes to be ticked, irrespective of either the utility of the course in question, or the merit of the content. Once achieved the recipient moves on to higher and greater things. The challenge is to get the experiences of command re-cycled so that those who follow-on benefit from their superiors in such a way that superiors themselves become far better purveyors of their experience, their science and their art. It is not just about what is learnt, but the very method of learning and the communication of learning.

Central to that mission is a new approach to understanding the role of the academy as an institution. The point of safe learning environments is to promote risk-taking, to celebrate thinking that challenges orthodoxy and to build analytical self-confidence. Given the very complex nature of operations today *group think* is the enemy. Consequently, all education and research must be seen as a real investment in the individual with the group becoming a place in which solutions can be tested and validated. Future academic defence education of officers will thus necessarily require a new interface between lessons-learned and contextual understanding – at both the historical or functional levels.

The Three Institute Academy

Therefore, the future defence academy should necessarily be built around three 'institutes'. A *Command Institute* would be devoted to the

betterment of leadership in all its forms. It would have a functional emphasis to better enable officers to prepare for the complex task-list through a much more specialised form of advanced education, reinforced by e-learning even in theatre. It would also be the guardian of continuous evaluation and set the standards for all officers to achieve, as well as being responsible for the continuous review of such standards.

A Learning Institute would be devoted to better understanding and promote the process of learning; how to learn and what to learn. The Learning Institute would also be the repository of lessons-learned. At its heart would be a process of continuous net assessment that would inform both education and operations through effective research. In effect, such an institute would be the nexus between research and education, between operations and academia.

A Security Institute would, in effect, be the education and research embodiment of the Comprehensive Approach embedded in a defence academy and at the interface of civil and military efforts. It would, by its very nature, be information-centric with the aim of generating innovative combined and joint civilian and military partners. It would roam wider than the defence academy *per se* for it would consider effective conflict prevention and diplomacy as part of its remit to address broader security effect.

At the heart of the future academy would be a radical education and research strategy with a product focus that stretches across the three institutes. The 'product' would be cutting edge curricula and a programme of research in support of education that would be constantly under review. The needs of the officers would be the critical ground. The objective is educated people who want to learn and who understand the relationship between learning and effect and information rich people who know how to generate information and use it at all levels of command. Above all, the objective must be to generate open-minded and intellectually elastic people who from the very beginning are in-

stinctively joint – including civilians. Indeed, effects-based education along the command chain could even involve ministers attending ultra senior courses relevant to their understanding of their place in the effects chain.

From Cadet to the Commander-in-Chief

The future academy would be thus nothing less than a one-stop shop for the generation of cost-effective effect through information and education that both shapes the future commander and reinforces the future commander, that advises on future operations and takes lessons from them and which reinforces the link of understanding between civilian leaders at the pol-mil level *and* the future officer at ground level. Nothing less will justify the tax-payers investment in such institutions. Nothing less will lead to the kind of thinking officer of the future – able to think, armed to think. Nothing less will create an effects continuum able to match the security continuum, in which defence is an important but not sole part.

Remember, the twenty-first century will still be the age of the network enabled multi-task effective, before it is the age of the network centric super warrior. The role of the mind will be as important as the capability. The future academy will be thus an enabler and a driver of change, able to match planning with performance through human software and capable of researching and providing answers to the knottiest of campaign and operational challenges. The future academy will be at the centre of an education-research-effect continuum.

Everything defence educators do must be grounded in that reality – the reality of the magnificent people they serve. Defence educators cannot let them down. Remember, some ages forgive mediocrity. This is no such age. ■