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The Lost Art of Deterrence Education

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The 2018 *National Defense Strategy* (NDS) and 2018 *Nuclear Posture Review* (NPR) have fundamentally reset the strategic direction of the United States military. Most notable is the underlying shift from terrorism to inter-state strategic competition as “the primary concern in U.S. national security.”¹ Additionally, the NDS portrays a long-term environment of “rapid dispersion of technologies, and new concepts of warfare and competition that span the entire spectrum of conflict...”² Moreover, the Secretary of Defense noted in the NPR that “we must look reality in the eye and see the world as it is, not as we wish it to be.”³ He also emphasized that the DoD’s top priority is to maintain an effective nuclear deterrent capable of deterring both a nuclear attack against the U.S. and its allies as well as “preventing large-scale conventional warfare between nuclear-armed states for the foreseeable future.”⁴ This sobering shift in national security focus reminds us of Brodie’s axiom that “the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them.”⁵

The NDS was a tacit reminder that the bulk of our military has been consumed with post-9/11 Overseas Contingency Operations (OCO). Primarily in Iraq and Afghanistan, overseas contingency operations are defined by the DoD as small to large-scale campaign-level military



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operations, including support for peacekeeping operations and international disaster relief efforts.⁶ Suffice it to say, OCO did not normally encompass operations to deter near-peer adversaries. The public pronouncement to pivot America's focus and resources to address near-peer, inter-state competition must also drive an in-kind focus on force development. Indeed, the vast majority of DoD's manpower under the ranks of O6/E8 have little or no experience in the near-peer mission space thanks to decades of OCO deployments and their associated requirements.

The NDS and NPR have objectively described a twenty-first century world of near-peer competition that combines Cold War-like hostility with the hasty proliferation of novel technology, while also demanding a "flexible, tailored nuclear deterrent strategy"⁷ to properly address this dynamic situation. Thus, in this rapidly changing geopolitical environment there remains an urgent need for more deterrence education. From nuclear to cyber, we face a very complex, multi-domain, multi-polar world that is characterized by a revolutionary change in technology and complicated by hybrid warfare, economic competition, and mass-disinformation. As former USSTRATCOM Commander Gen. Kevin Chilton (USAF, Ret.) has noted, "The underlying principles and rationale for the deterrent have not gone away, but we have stopped educating, thinking, and debating, with informed underpinnings, the necessity and role of the US nuclear deterrent in today's world. Even more concerning has been the lack of informed debate on the subject. We have raised three generations of Air Force officers who may not have been exposed to the most fundamental and yet relevant arguments surrounding deterrence from the late nuclear theorists Herman Kahn and Thomas Schelling."⁸ This dovetails the 2008 *DoD Nuclear Weapons Management* report which observed that the Task Force found a "distressing degree of inattention to the role of nuclear weapons in deterrence among many senior DoD military and civilian leaders. Many lack the foundation of experience for understanding nuclear deterrence, its psychological content, its political nature, and its military role – which is to avoid the use of nuclear weapons. A lack of education on nuclear deterrence has contributed to this problem. This shortfall of experience and understanding will become even more acute among senior leaders in the future."⁹

The former Secretary of Defense James Schlesinger also noted in 2008 that "what has been the long-time practice during the Cold War and subsequent years of developing the theory and doctrine of deterrence has more or less disappeared [and] the doctrine of deterrence has, to a large extent, been forgotten."¹⁰ This idea was reaffirmed in the 2014 National Defense Authorization Act which noted "that challenges remain in educating airmen on their role in safeguarding national security. Educating the warfighters who execute the daily mission of nuclear deterrence remains a critical element to ensuring the level of excellence required for the mission."¹¹



What Is Deterrence Education?

To study deterrence is to study the very mechanics of inter-state peace; perhaps even global peace. Fundamentally, deterrence is about the following: averting existential attack on the homeland, assuring our allies and partners and, should deterrence fail, limiting opponents' conflict escalation via intra-war deterrence.

To achieve effective deterrence, the Air Force, which operates two-thirds of the nation's strategic nuclear Triad, has routinized deterrence with process and procedure, often characterizing the effort as an "operation" while trying to satisfy its doctrinal edict that deterrence is in fact – an "effect."¹² These intricacies necessarily complicate the orchestration of deterrence strategy and consequently demand a well-educated cadre of deterrence thought leaders and practitioners.¹³ That is why the study of the deterrence must move beyond the curriculum-shadows of operational warfare and military strategy. The study of war is necessary to achieve victory on the battlefield and ultimately win the nation's wars; but the study of deterrence is essential to averting the need for large-scale operational warfare and winning the nation's peace.

While the principle of deterrence has existed since Biblical times, the theory has grown sophisticated over the millennia. The concepts and theories have evolved from mere threats of retaliation to an interconnected web of denial and defense, energized by alliances and complicated by multi-domains, technology, and nuanced messaging. Understanding the complexity of deterrence requires a key understanding of theory, history, culture, geography, psychology, international relations, economics, and strategic communication, as well as adversary doctrine and capabilities. From a military perspective, "effective deterrence requires global situational awareness, rapid decision-making, effective force management, and reliable force direction."¹⁴

The study of deterrence crosses the academic spectrum at the whole-of-society level. Indeed, strategic deterrence thought leaders must be knowledgeable in deterrence theory (how it works), history (when and why it worked), means and force postures (what it needs to work), roles of allies and treaties (supporting its work), escalation management (making it work again after it initially fails), adversary perspectives (how they think it works), and strategic messaging (communicating its work). Understanding the distinction between dissuasion, deterrence, denial, defense, and assurance, as well as being able to consider second- and third-order effects requires future leaders and those who would advise future leaders to be knowledgeable practitioners and champions of deterrence strategy across the diplomatic, information, military, and economic (DIME) spectrum.



The Idea of Effects-Based Education

The Air Force has acknowledged the need to “develop and foster Air Force critical thinking on deterrence and assurance.”¹⁵ The resulting education programs have been profound and include a re-emphasis on deterrence thought within established Professional Military Education (PME) programs and the establishing of several in-resident nuclear enterprise-related Professional Continuing Education (PCE) programs. Additionally, the Chairman of the Joint Chiefs of Staff has placed a special emphasis on two specific areas of study in order to bolster his desired joint PME curriculum: 1) *the return to great power competition*, and 2) *strategic deterrence in the 21st century*.¹⁶ Acknowledging the capacity limitations of today’s PME and PCE, the Deputy Chief of Staff (DCS) of the Air Force for Strategic Deterrence and Nuclear Integration (AF/A10) recently released cogent guidance that establishes continuing education requirements.¹⁷ The guidance describes an initiative for “developing nuclear and deterrence thought leaders...who are able to think at the campaign and strategic levels.”¹⁸ To meet this need, the Air Force uses the *Continuum of Learning* initiative.

The Air Education and Training Command’s *Continuum of Learning* (CoL) initiative contains innovative approaches to answer the nation’s call for “education action.” The CoL’s innovative learning methods are intended to develop more intellectually creative, cogitative, and competent strategic thinkers. They include:¹⁹

1. Modularized learning (using smaller course blocks)
2. Blended learning (using multiple modalities to deliver courses)
3. On-command and on-demand learning (directed vs desired course enrollment)
4. Competency-based learning (credentialing)

In order to shoulder the NDS’s and NPR’s acknowledgment that near-peer, inter-state competition has returned, and with it the associated revivification of deterrence thought and strategy, the Armed Forces must appropriately edify the force. The need for a deterrence-informed force is immediate and focused education is the solution to overcoming the decline in nuclear deterrence expertise within the military.²⁰ One way to efficiently address this education deficit and effectively apply the CoL is through the function of “effects-based education.”

To borrow a common military theme, effects-based education (EBE) is the purposeful design and delivery of focused education in order to achieve desired education outcomes. The goal of EBE is to apply a customized deterrence education toward an intended education outcome or product. The application of the CoL, when suitably resourced, optimally targeted, and fundamentally deliberate can energize EBE and promptly advance nuclear deterrence workforce development. The desired EBE outcome is the *personified effect* of deterrence



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education. To that end, the *personified effect* or the ideal consumer of deterrence education, would be binned as either the *Aware*, the *Artisan*, or the *Advocate*.

First, we must infuse the entire force with strategic nuclear deterrence *awareness*. Awareness is the knowledge and understanding that something is happening or exists.²¹ Deterrence awareness is the exposure to and appreciation of deterrence concepts, themes, mechanisms, and values. From the infantry soldier to the dentist and from the cook to the civil engineer, deterrence is a Total Force endeavor. By making the Total Force *aware* at the “basic” level, we will enrich the common understanding of deterrence purpose and mission. Awareness education should be engaging and tailored to specific audiences that would be expanded or contracted to correspond with the associated measures of support to deterrence-related operations and policy. These are “the Knowers” who remember and understand²² the basic subject matter.

Second, we must effectively generate, develop, and enrich the deterrence *artisan*. The artisans-of-deterrence are professional practitioners who effectively orchestrate deterrence-related resources and policy across the domains on a daily basis in order to achieve the desired deterrent effect. The *artisans’* competencies are “proficient” via requisite training, but are not “skilled” until formally educated in theory application using the EBE design and tempered by substantive experience. These are “the “Doers” who can apply, analyze, and evaluate²³ the subject matter of deterrence.

Lastly, we must harvest the expertise derived from advanced *artisans* steeped in years of deterrence education and experience to generate the cultivated *advocate*. Because deterrence is a complex subject where it is difficult to measure success, advocacy becomes a challenge that can only be met by “advanced” thinkers and strategists. These strategic “thinkers” and planners would inescapably be the decision makers or advisors to the decision makers who must in turn articulate and champion the resourcing and innovative applications necessary to achieve any meaningful deterrence effect. These are “the Thinkers” who can evaluate²⁴ and facilitate the implementation of effective deterrence policies and strategies.



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| Personified Effect | Competency Level | Desired Audience Education Level Outcome | Product |
|--------------------|--------------------|---|----------------|
| Aware | Basic/Intermediate | Holistic force orientation & appreciation | “The Knowers” |
| Artisan | Proficient/Skilled | Focused professional & practitioner force development | “The Doers” |
| Advocate | Advanced | Cultivated champion/ strategists/decision maker development | “The Thinkers” |

Cultivating a workforce that can effectively resource and orchestrate any strategy to achieve deterrence is vital to the maintenance of global peace. In total, the DoD will spend nearly \$500B over the next decade to sustain and modernize its nuclear enterprise.²⁵ The DoD must also sustain and modernize its workforce to ensure efficient orchestration and deterrence achievement. Thus, educating the workforce is key to its development and must be done deliberately and without delay.

Effects-based education operationalizes and channels the CoL’s various methods of education delivery. Matching desired competencies to targeted audiences will ensure tailored deterrence education programs are delivered in measured amounts over shorter time periods. The synchronized employment of modularized courses in blended learning environments, when needed or desired, would satisfy any EBE goal as long as the *personified effect* (workforce) is identified first.

Once the *personified effect* is identified, deterrence education would then be backward-planned, tailored, and goal-oriented to the individual’s needs as well as the institution’s requirements. A designer-EBE plan for *awareness* might be the blended use of interactive computer-based education modules, supplemented with a resident seminar/lecture, repeated every 2-3 years. An example of tailored EBE for *artisan* development might be a series of self-paced, self-study lessons, supplemented with simulations and face-to-face resident seminars, and augmented with a formal distance learning graduate certificate or master’s degree. Finally, developing the *advocate* would require a personalized EBE plan that would include a formal masters or doctoral degree in the subject matter of deterrence via in-residence or distance learning delivery supplemented by case-studies, simulations, or table-top exercise-driven seminars, during their leadership assignments. The effects of mixing short-term modularized learning events with longer-term educational opportunities will increase the prospect for prompt and focused scholarship while simultaneously increasing the quality, quantity, and tempo of *artisan* and *advocate* production.



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The progression from “Knower” -- to “Doer” -- to “Thinker” must be engineered and institutionalized. Effects-based education seeks to stack deterrence-related education in order to achieve compounding results that best meets the goal of the “Knower,” “Doer,” or “Thinker”.

Summary

Twenty-first century deterrence requires sophisticated “Doers” and “Thinkers” who are surrounded by a population of “Knowers.” Those *artisans* and *advocates* must be created and nurtured in a persistent and innovative fashion. Tomorrow’s deterrence “Doers” and “Thinkers” must not only be well versed in theories and application of deterrence, but must also understand how to orchestrate the array of national instruments of power in order to produce the desired deterrence effect--peace.

Effects-based education, in conjunction with the *Continuum of Learning*, is an efficient application of competency-focused deterrence education tailored to the pre-selected end-user *personified*. By focusing on the *personified effect* for the ideal consumer of deterrence education, the EBE constructs the CoL in reverse from the desired result; ensuring the most efficient and efficacious education is transferred, thus saving time and smartly using resources. “Building” deterrence thought leaders is challenging today because we have not been so engaged for decades and must now find the time needed to inspire, edify, and mature. Effects-based deterrence education may be just the solution.

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