

Innovation in Education

The Innovation in Education column highlights new or updated praxes, pedagogies, and activities associated with learning and teaching in Professional Military Education. The column is meant to share high impact practices and novel methods of teaching according to the latest research from the field of educational science. Dr. Bell's article originated from a presentation to the Centre for Land Warfare Studies as part of the Pragyan Conclave 2022 on the Future Wars and Counter Measures held in New Delhi, India from 03-04 February 2022. The article addresses the persistent debate regarding the role of training and education.

Doing and Thinking: Integrating Training and Education for the Best Outcomes

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Training and the military are almost synonymous. Militaries have emphasized training since fighting began thousands of years ago. It is right to recognize there is a difference between training and education in the military, which requires understanding the military purposes and distinctions for each.¹ Of course, there has been, in modern times, consistent debate about the distinction between training and education in the military. While it seems there is a great divide between the two camps, it is more often a case about nuance. To that nuance, what is less considered and infrequently discussed is the time at which education becomes relevant, both in terms of individual development and in the greater conversation of military advancement. Specific to the U.S. military, education seems to date to the beginning of the U.S. Revolutionary War in 1778. The nation's founding father, George Washington, directed his Army chaplains, religious guides embedded in the ranks, to teach the soldiers to read.² Perhaps surprisingly, he made the order, not to improve their performance as a soldier, but to improve their quality of life. Although he likely recognized that literacy would improve their perspectives, their attitudes, and therefore, he seemed to suggest, literacy would also improve soldiers' ability to perform their duties. In all the huffier and puffier, the real debate—the nuance of the debate about training versus education—comes down to the purposes to define and apply them appropriately.

Joint Publication 1 as the capstone publication for all US joint doctrine defines military power as the integration with other instruments of national power to “advance and defend U.S. values, interests, and objectives.”³ Only when military power is combined with diplomatic, informational, and economic power is the U.S. able to achieve its objectives. In a singular summary, General Milley, the Chairman of the Joint Chiefs of Staff, stated that “our children are the real reason that we in uniform all serve. Some say it's education, some say it's money, or for a

¹ The views expressed are those of the author(s) and do not reflect the official policy or position of Joint Forces Staff College, National Defense University, the Department of Defense, or the U.S. Government.

variety of other reasons. No, it's for others. We serve for others. And most importantly, we serve for our children.”⁴ If the sole purpose of the military is not merely to be destructive—to break things and kill people, but to advance and defend interests and objectives, making the world a better place for future generations, then the question naturally follows: What does the military need to do to effectively integrate with the other instruments of national power? And: How does the application of training and education allow military actions to create positive operational and strategic effects?

Defining Training and Education

According to Daniel Burrus, training is task-oriented; training is skills-based.⁵ In this case, a military organization trains someone to do something in a specific way for a specific purpose. That training is meant to increase someone’s proficiency through standardization, but it depends on the quality of the training effort. You get out of it what you put into it.⁶ Here are some common examples of training:

- Training how to disassemble and assemble a rifle
- Training how to fire a weapon and hit a target
- Training how to survive when your aircraft is shot down
- Learning how to input data into a spreadsheet
- Training to run faster or longer

A trained person may get better at hitting a target. They may get faster and stronger. In both examples, however, they are unlikely to find a new and better way to do something or find a novel use for the same skill. Because training has a skills-based focus it does not provide the depth needed for creative problem solving and innovation.⁷

Alternatively, Burrus defines education as concept-based.⁸ Education is a form of learning, like training, but education encourages people to think, analyze, evaluate, interpret, or synthesize information and apply creative thought to rebut an argument, solve a problem, or reach a conclusion. Education is learning to see the big picture of why and how things work together, integrating and innovating.

Some examples of education are:

- Learning about theories of war
- Learning what Sun Tzu, Carl Von Clausewitz, or Giulio Douhet thought about the relationship between politics and military power or how to best apply military power to create a desired effect
- Learning about the art of war
- Learning how Chairman Mao viewed the world
- Learning the extent to which international relations theories explain, or don’t explain, how nations and national leaders think about the world
- Understanding cause and effect in World War II and deriving principles of conflict and politics

An educated person sees connections and embraces a wide perspective of events and possibilities, even gaining empathy for actors within and without an organization. Education includes thinking about and understanding diverse cultures and how to perceive a situation from multiple perspectives. Training is narrowly focused, and education is widely focused.

Purposes of Training and Education

In a 1997 monograph, Kime and Anderson write that the U.S. Founding Fathers considered it important to provide both training and education. The idea that military personnel are only trained to kill became increasingly anachronistic in the late 20th century. The lines formerly drawn between those who need education and those who need training have become blurred, if not irrelevant. Education without training is correctly understood as folly. When the military considers including senior enlisted officers in traditionally officer focused courses, they are wrestling with the training and education paradigm. However, it manifests organizationally and hierarchically, the military cannot train the uneducated, and the educated need the grounding of training.⁹ Yet, despite the obvious and practical necessity, the debate about the importance of both training and education rages on.

The military prizes health and fitness. Many of the fitness tests try to identify whether a servicemember has endurance or strength. Which is more important for a servicemember, to have greater endurance or more strength? It is a fraudulent question based on a false dilemma. The real question should be: What is one without the other? A physically fit servicemember must have both endurance and strength. A servicemember with only strength will not last a protracted conflict. A servicemember with only endurance may last the duration of a conflict but may not have the strength required for specific moments. Both capabilities are necessary for true fitness and the combinations of events conflict presents.

While serving on the US Army III Corps targeting cell, one of the soldiers who worked with me was a bodybuilder. He won many competitions and worked hard to display beautifully developed muscles. In fact, sculpted might be the more accurate term; he took that much pride and love in the process. A Michelangelo of muscles he might have monikered himself. One night I asked him to help me lift and move some heavy equipment and he told me, "These muscles are for looking at. They ain't for working." We chuckled, but he meant it. His body was pure form and not function. Here was this seemingly precisely developed physique, that was unwilling—if not incapable—of doing real work. He had what appeared to be extreme strength, but it wasn't useful as it translated to creating enduring power.

Balancing endurance and strength, like balancing training and education, shows the interdependent requirement for generating power. Balanced endurance and strength in physical fitness lead to physical power. Balanced training and education in the military lead to combat power.

A servicemember trained to do only certain tasks lacks the education necessary to employ those skills in ways that create power beyond the specific tasks. A servicemember only educated on theory and history lacks the specific training necessary to apply that knowledge. To think it is

either-or is foolhardy. Each enables the other. The combinations of training and education, education and training enable the military to create operational and strategic effects.

Balancing Training and Education

Consider the paradigm of training and education in terms of escalation dynamics. In my hypothetical scenario, there are three officers.

Officer A is well trained.

Officer B is well educated.

Officer C is well balanced in both training and education.

In the hypothetical example, there is an escalatory situation on the border between the US and Mexico. A drug cartel is operating on the U.S. southern border and cartel operatives are escalating the level of violence to increase their ability to traffic drugs and people into the United States.

Officer A, the one who is only trained, sees her response options as rather binary. She can either lead her soldiers to use all weapons at their disposal to defeat the enemy, or she can cede the initiative and allow the cartel operators to conduct their cross-border operations. The officer does not have the education she needs to understand the ramifications of her decisions. She does not have the concept of how to make a decision to support the broader concepts related to escalation management. She lacks power because she has limited ideas and options. Remember, power is not merely destructive.

Officer B, the one who is only educated, is thinking about what the theorists would do. If he thinks about how to apply the concepts of theorists such as Von Moltke, Mitchell, Galula, or Trinquier, then he is thinking about how to mass effects. The problem is he does not have the necessary training to translate the theories into action. He does not have all the tools he needs to create an operational or strategic effect that escalates or de-escalates appropriately. He does not have the right training to make a decision and translate it into action to support the broader concepts related to escalation management. He lacks power because he lacks the knowledge of how to organize people and sequence tasks to achieve it.

Officer C, the one who has both training and education, knows how to employ their forces to best create an environment to manage the escalating situation. Officer C can combine their training with their education and move out of the theoretical environment. They understand how to leverage their military forces to change the situation to achieve an operational and strategic objective. Their education allows them to envision and recognize opportunities; their training offers them organization and interpersonal conduits to direct and achieve that vision. They have power because they have both ideas and the physical instruments to implement those ideas.

The notion of balance is inexplicably absent from the conversation at most institutions. Walking through the halls after engagements with two major think tanks, the Office of the Secretary of Defense, and members of the Joint Staff, two of the Joint Advanced Warfighting School (JAWS)

international fellows stopped me. They explained how the education at the School is changing their perspectives and lives in ways they never imagined. Two Colonels, exceptionally well trained had not been exposed to military education at the graduate level like the Joint Advanced Warfighting School. Their point was that the education at JAWS was revolutionary because it didn't tell them *what* to think; it showed them *how* to think.¹⁰

Conclusion

Though called by different names, servicemembers across militaries are required to undergo fitness reports and fitness evaluations. A truly fit servicemember has the perspective of education and the training of the organization. The fit servicemember can draw from history and theory to think through options and then implement their decision through the ranks, wielding the force as an instrument appropriate to the context.

Looking the part is not enough; wearing the uniform is not enough; good grooming, a good physique is not enough. Likewise, thinking big thoughts is not enough. Reality has a way of puncturing the dreams and thought bubbles of idealists.

Managing escalation in the 21st century is more complex than ever before. The strategic and operational environments are more complicated than ever before. Competition and conflict can go awry in more ways, more quickly than in previous eras. A soldier must be grounded in the fundamentals, which means better training and greater education. Training to know what can be done and having the skill to do it. Education to understand the adversary and to conceive of the options, leverage timing, and make insights. Managing escalation requires both training and education to avoid being more than a force of destruction and to achieve the interests of a nation.

One of the most crucial factors in improving graduate outcomes is engaging with people with different types of training and education. Faculty at the Joint Forces Staff College (JFSC) facilitate learning while also leveraging student experience, so students can learn how to think differently and account for the ways others think. Students hail from all six military services, the Defense Intelligence Agency, the Department of Homeland Security, the Department of State, and nations across the globe to create seminars of students with varied backgrounds and experiences.¹¹ A nation can spend an exorbitant amount on money on the most advanced military equipment, sure. But without an educational system in place to ensure the military personnel operating that exquisite materiel are balanced between training and education, the nation will not be able to effectively create military power. Military power integrated with diplomatic, informational, and economic power will “advance and defend [that nation’s] values, interests, and objectives.”¹²

¹ David Morgan-Owen, “Approaching a Fork in the Road: Professional Education and Military Learning,” War on the Rocks, July 25, 2018, <https://warontherocks.com/2018/07/approaching-a-fork-in-the-road-professional-education-and-military-learning/>.

² Steve F. Kime and Clinton L. Anderson, “Education vs. Training: A Military Perspective,” by Steve F. Kime Director Servicemembers Opportunity Colleges and Clinton L. Anderson Senior Consultant, 1997, <https://files.eric.ed.gov/fulltext/ED404452.pdf>, p. 6.

³ U.S. Department of Defense, “Joint Publication 1, Volume 1, Joint Warfighting, Reference Copy” Washington D.C., June 19, 2022, p. II-8.

⁴ Mark A. Milley, Chief of Staff of the Army, “CSA’s Speech at Change of Responsibility Ceremony,” U.S. Army, May 4, 2016, https://www.army.mil/article/154050/csas_speech_at_change_of_responsibility_ceremony.

⁵ Daniel Burrus, “Teach a Man to Fish: Training vs. Education,” Burrus Research, June 10, 2015, <https://www.burrus.com/2015/06/teach-a-man-to-fish-training-vs-education/>.

⁶ Burrus.

⁷ Burrus.

⁸ Burrus.

⁹ Kime and Anderson, p. 7-9.

¹⁰ Paula Thornhill, “To Produce Strategists, Focus on Staffing Senior Leaders,” War on the Rocks, July 20, 2018, <https://warontherocks.com/2018/07/to-produce-strategists-focus-on-staffing-senior-leaders/>.

¹¹ The six U.S. military services include the Army, Air Force, Coast Guard, Marine Corps, Navy and Space Force.

¹² Department of Defense. Joint Publication 1JP 1, p. II-8.