Modernizing Military Education

Increasing cerebral lethality in the uncertain battlespaces of tomorrow by Capt James Whitcher

he current operating environment demands that the Marine Corps adapt. Gone are the days where commanders had to consider simple dichotomy as if they were attacking a bunker that possessed a light machine gun or a heavy machine gun. The one-block war concept is certainly antiquated, and even the "Three-Block War" concept may be becoming archaic. Warfighters of today will be faced with a myriad of complexities. The three-block war may have to be expanded to involve the addition of fourth, fifth, or neighboring blocks. Today, non-state actors will employ leading-edge technology an utilize asymmetrical tactics in some of the following domains: automated artificial intelligence (AI), cyberwarfare, AI Warbots, swarming, social media,

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ideologies, flash mobs and riots, chemical warfare, biological, and viral—to name a few, not including conventional tactics.

Non-state actor groups will continue to proliferate in the world, and they will develop tactics that we have no precedent or doctrine in which to compete with them; we will have to adapt in realtime, making snap decisions in amorphous environments. Peer competitors will meet us with overwhelming firepower. We have long grown accustomed



Personal participation in PME by the Corps' most senior leaders demonstrates the importance of education and lifelong learning. (Photo by Cpl Demetrius Morgan.)

to being dominant in the air, land, and sea. Every domain will be contested against a peer adversary, and we will face unforeseen challenges and must adapt because of it. Future amphibious operations will face asymmetrical challenges as well. In the words of Gen Gray, "If we cease to refine, expand, and improve our profession, we risk becoming outdated, stagnant, and defeated."¹

The Marine Corps seeks to find answers to problems that we cannot accurately forecast. Socrates once quipped, "The only thing I know for sure is that I know nothing at all, for sure." The future operating environment will be unknown, for sure. We cannot accurately predict what we will encounter. The Marine Corps may have an assessment of how an adversary will respond on D-Day or D+1, but he will certainly adapt and change his tactics by D+5 if we are having success on D-Day. God help us if we are stymied on the initial waves. It follows that all our training for D+1 will be outdated by D+5. We need to educate our Marines to solve problems on every day of the operation.

The first step the Marine Corps should take is to develop cerebral critical thinkers. Training prepares for the known, education prepares for the unknown. This is the highest priority for the future of amphibious operations. The "Strategic Corporal"² concept argued by Gen Krulak is becoming more relevant every day. Small unit leaders' decisions will have sweeping operational, strategic, and geopolitical effects.

When Marines hit Tarawa, Iwo Jima, and Belleau Wood, they faced symmetrical warfare against a uniformed opponent. In tomorrow's fight, Marines will find themselves fighting against an opponent in which they have no education to defeat. The first resistance faced may be in the form of an AI Warbot or some other artificial intelligence piece. Or, against a peer competitor, they may face incredible conventional resistance at the beachhead. Regardless of the opposition, the Marine Corps will employ the maneuver warfare tenant of decentralized execution. This becomes possible if small unit leaders make snap decisions against novel challenges without oversight from their higher.

Coup d'oeil is an intuitive concept based on knowledge and instinct in which a decision maker develops a course of action rapidly to suit the need. Napoleon thought coup d'oeil was in great generals and further amplified that "what one believed to be a happy inspiration proved to be merely a recollection." Acquiring this characteristic requires a degree of intellectual development and discipline. It was utterly important for generals to study diligently and unconsciously draw upon lessons learned from their education. In today's warfare, it is incumbent upon the smallest unit leaders to have the *coup d'oeil*. The genesis for the Strategic Corporal concept by Krulak should extend to the basic tenants of generalship by Napoleon. The MAGTF requires corporals and fire team leaders to have the innate ability to evaluate a situation and develop a rapid—and most importantly an effective—course of action amidst the fog of war.³

The only way to be truly ready for any challenge is to have exquisite problem solvers at every level of the MAGTF. The 2018 National Defense Strategy highlights professional military education (PME). It states:

> PME has stagnated, focused more on the accomplishment of mandatory credit at the expense of lethality and ingenuity. We will emphasize intellectual leadership and military pro

fessionalism in the art and science of warfighting, deepening our knowledge of history while embracing new technology and techniques to counter competitors. PME will emphasize independence of action in warfighting concepts to lessen the impact of degraded/lost communications in combat."⁴

Marines at every level should be developed intellectually and capable of making snap decisions against novel opponents. PME should not be a simple check in the box requirement for the next grade. PME should develop problem solvers. How do we do this? PME is institutional. Expeditionary Warfare School and Command and Staff are invaluable modalities but not all encapsulating. All Marines are educated in a cohort that is incredibly like each other; there is no diversity.

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Captains and majors should be able to opt out of EWS or Command and Staff and attend an institution of higher learning in a field such as, say, chemistry, with people who are vastly different from them. The young officer would be exposed to arcane problems and must cerebrate on new horizons where he is not comfortable. The only litmus test required is that of academic rigor. Marines should be encouraged to seek advanced degrees in any of the science, technology, engineering and mathematics (STEM) topics.

When a young officer is placed in an advanced-degree program with civilian students, he will fundamentally be out of his comfort zone. A captain with six years on active duty is quickly becoming comfortable in the Marine Corps and sees solutions to problems that his peers would readily accept and agree too. Now, take the same captain and enroll him in a Master of Science in Physics at the University of Wisconsin. They will be collaborating with civilian students who have a vastly different background and see complex problems through different paradigms. The captain will be posed problems that are unique and new.

The advanced degree in the civilian sector is not the answer for all Marines. There are some Marines that will not withstand the pressure of rigorous academia. But, if a Marine should choose to seek an advanced civilian degree that is academically rigorous, they should be able to opt out of the "required" PME. Officers attaining advanced degrees in STEM will pay dividends on emerging threats. The basic premise of the STEM fields is the solving of complex problems. Students emerge from these fields and are identified as critical thinkers.

PME should be intellectually engaging that focuses on embracing as Mattis said: "independence of action," or the Warfighting tenant of decentralized execution. There is nothing boring about warfare or the theory of human competition, yet Marines consider PME to be largely bromidic. Secretary Mattis was spot on when he asserted that PME has: "focused on accomplishment of mandatory credit." The Marine Corps must cease having adult learners stand up in the middle of class to read Power-Point slides off for the rest of the class. Intellectual curiosity is stymied with our current practices of PME. Human curiosity has exploded in the last century and even so in the last decade. Human questions do not go unanswered by Google or high-powered search engines. The Marine Corps education is not capturing the essence of human curiosity that is innate in its members or etching it into their long-term neural synapses.

Martin Luther King said, "intelligence plus character, that is the goal of true education." PME should not focus purely on intellectual advancement. Marines need to be virtuous individuals first and foremost. Ethical decision making is the most valuable trait—bar none—that the Marine Corps can instill in its warfighters.



Battle studies such as Antietam (Sharpsburg), pictured here, can incorporate physical conditioning and critical thinking. (Photo by Cpl Eric Keenan.)

Warren Buffet has quipped: "We look for three things when we hire people. We look for intelligence, we look for initiative or energy, and we look for integrity." He would go on to say that if you have the prior two, you will just have smart, energetic people that will steal from the company. The Marine Corps cannot have individuals such as LT Calley (My Lai), COL Forsyth of the 7th Calvary (Wounded Knee), or Sgt Frank Wuterich (Haditha)—to name a few. In today's connected world, all errors will be broadcasted on the world stage. Any dereliction of character will be exploited by our adversaries. In turn, hatred and anti-American sentiment will be fueled and propagated. This increase will enhance our adversaries recruiting and will in turn give our opponent greater strength.

Our Marines need to embody virtue. Wherever we deploy to next, we can be certain our actions will be captured on a smartphone and published for the world to view on social medias. Education at all levels should seek to graduate servant leaders who possess nothing short of irreproachable integrity and cerebral aptitude. The goal of education is smart decision makers with character. Without the latter, you are just instilling smart individuals who will capitalize on the situation at hand for their own self-desires.

In the final analysis, Marines should receive Fitness Reports from the respec-

tive schoolhouses. There is currently no FITREP or any marks for students leaving PME. The student who graduates at the bottom of the class is viewed similarly as the person that graduates at or near the top. If we are to place an emphasis on developing critical thinkers, Marines should receive FITREP markings for their efforts in the classroom. Under the current model, a student can show up and do the bare minimum with no performance marks to track for their respective performance. Marines should be receiving educational FITREPs that fall just below Combat FITREPs in terms of importance.

MCDP 7, *Learning*, is quoted as saying:

Learning is an institutional priority and a professional expectation for all Marines. Continuous learning is essential to maneuver warfare because it enables Marines to quickly recognize changing conditions in the battlespace, adapt, and make timely decisions against a thinking enemy ,,, The Marine Corps must foster a culture of learning."⁵

The institution is going to start placing an emphasis on learning and one's ability to learn. We should have a FIT-NESS report occasion for PME that is weighted. Currently, a promotion board only sees the PME that is completed or not but tells nothing about the Marines ability to learn. Marines should be promoted, or not promoted, based off their ability to "make timely decisions against a thinking enemy."

The small unit leaders will largely determine if we as a MAGTF are successful in forthcoming amphibious operations. The face of war is changing. The enemy will not be predictable. Challenges Marines face will be novel and new. We cannot "train" for future conflicts, but we can and must "educate" small unit leaders for unknown problems in future conflicts. Gen Neller said, "Though the battlefields change, and capabilities evolve, history proves that true victory comes from the individual Marine."6 Future battlefields will hinge solely on small unit leaders making snap decisions. PME should shift from being focused on mandatory credit for the next grade to that of instilling a lifelong habit of learning.

Notes

1. Headquarters Marine Corps, *MCDP 1, War-fighting*, (Washington, DC: 1997).

2. Strategic Corporal: Simply stated, the small unit leader's decisions will have sweeping implications that can extend to the strategic level.

3. Staff, *Warfighting–Doctrine Coursebook*, (Quantico, VA: Expeditionary Warfare School, College of Distance Education and Training, 2018).

4. James Mattis, *National Defense Strategy*, (Washington, DC: Department of Defense, 2018).

5. Headquarters Marine Corps, *MCDP 7, Learning*, (Washington, DC: 2020).

6. Gen Robert Neller, A Message from the Commandant of the Marine Corps, (Washington, DC: 2018).

