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Welcome to the fourth edition of the *Journal of Military Learning (JML)*. As the editor of the *JML*, I am proud of the tremendous professionalism and dedication that our authors, editors, and reviewers have demonstrated in bringing this issue to you. As Army University becomes fully functional, we strive to achieve the highest educational writing standards as a peer-reviewed semiannual publication that continues to improve education and training for the U.S. Army, our professional military education (PME) system, and the overall profession of arms. The *JML* is the Army University's professional educational journal, bringing current adult learning discussions, new adult education writing, and current educational research from the field for the development of our present and future leaders, current PME faculty, and all levels of Army staffs.

Education is a continuous process that enhances our profession of arms, and the *JML* continues to encourage intellectual discussions regarding education, instructor and faculty development, and alignment of PME with universities and colleges. Providing a quality education to soldiers and leaders, improving curriculum, and improving our instructors effectiveness increases our Army's readiness. Thus, the peer-reviewed articles in this edition include what our professional military leaders need to know through enhancing PME, self-reflection as a tool, foundational theories and approaches to ethics education, digital textbooks, and leveraging technology to improve student learning. One article of interest discusses



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the intersection of leadership and emotions, another examines U.S. Air Force military training instructor competencies, and a third describes the advantages provided by the Army Learning Coordination Council.

I continue to encourage soldiers, instructors, researchers, and military professors, both uniformed and civilian, to submit articles to this educational journal. Only through critical thinking and challenging our education paradigms can we as a learning organization fully reexamine and assess opportunities to improve our military education and learning. A detailed call for papers and the submission guidelines can be found at <https://www.armyupress.army.mil/Journals/Journal-of-Military-Learning>. ☞

Foundational Theories and Approaches to Ethics Education within the U.S. Military

A Literature Review

Stephanie K. Erwin

Leslie Kirsch

Abstract

The U.S. military faces significant challenges in addressing ethics learning due to the size, diversity, and complexity of the services. The issues are confounded by the large differences between the individual services and the wide range of demographics of their members. Further, ethical failures for the military are particularly damaging due to public scrutiny by media and external expectations of a higher moral standard. This literature review explores the theories and approaches used by the U.S. military in addressing the challenges of articulating, communicating, and training service members to act in accordance with the services' values. Limitations and gaps in the existing research will be discussed. Given that the U.S. military's driver for ethics education is a need for consistent action from its members, not consistent cognition, our focus is on approaches and methods that are expected to result in behavioral changes related to moral reasoning (i.e., applied military ethics). The authors present discussion of the underlying philosophies of ethics education influencing the selection of associated educational approaches, articulate the approaches in use by U.S. military educators, and conclude with an analysis of what gaps remain in the literature and associated implications for future study.

Modern warfare, due to its asymmetric nature, raises new challenges for the human resource development function and adult learning in military services. Among these challenges is the need to ensure that the services' ethical values are conveyed, developed, and internalized by individual service members and civilian employees. The U.S. military faces significant

challenges in broadly addressing ethics learning issues due to its size, complexity, diversity among the individual services, and wide range of demographics of its members. Further, ethical failures for the military are particularly damaging due to the public scrutiny via media, expectation for a higher moral standard, and determination that the military will remain subordinate to its civilian leadership. “America is vulnerable to the moral failings of its military commanders, whose injustice, indifference, impatience, or intolerance toward others peoples would secure us deep enmity and shame, shredding the last remnants of our leadership and moral authority.”¹ High profile examples of ethics failures in the U.S. military such as the My Lai massacre, the Tailhook assaults, and the Abu Ghraib abuses illustrate the potential costs to the global reputation of the American Armed Forces and the criticality of strong ethical development in service members of all ranks. To this day, significant ethical failures by the U.S. military are highly subject to public scrutiny, as illustrated by the recent Fat Leonard corruption scandal.² This literature review explores the learning theories and approaches used by the U.S. military in addressing the challenge of conveying and developing organizational ethics, including limitations and gaps in the existing research.

Purpose

The purpose of this study is to characterize the learning theories and approaches utilized by the U.S. military for ethics development by asking, What theories describe and inform the learning approaches used by the U.S. military to convey organizational values related to military ethics and the relative efficacy of these approaches? Are there significant variations between the services? What alternative theories might potentially be applied to military ethics education? What gaps emerge in understanding the U.S. military’s ethical learning approaches and what

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are the implications for future research? For purposes of this review, we define the U.S. military to consist of the U.S. Army, the U.S. Marine Corps, the U.S. Navy, the U.S. Air Force, and the U.S. Coast Guard.

There is no single accepted definition of military ethics; for the purposes of this review, we have used a definition of military ethics applicable to the U.S. military context: “those qualities of moral character that impel individual citizens to accept the civic obligation to prepare for, support, and fight well in defense of the republic, with a moral code congruent with the oath to support and defend the Constitution.”³ Further, there is no single accepted method or approach for transferring and developing ethical values, with competing conceptions provided by the disciplines of moral philosophy, behavioral psychology, education, and others. Given that the U.S. military’s driver for ethics education is a need for consistent *action* from its members, not consistent *cognition*, the focus herein lies on approaches and methods that are expected to result in behavioral changes related to moral reasoning, such as applied military ethics.

Methodology

To identify potentially relevant literature, the authors conducted a keyword search in four academic and peer-reviewed databases related to either education or the military: Education Source, EBSCO, GWU ArticlesPlus, and the Military & Government Collection. The authors used varying combinations of the search terms *education*, *training*, *military ethics*, *ethics*, and *military*. The results were subsequently reviewed to determine whether they were responsive to the research question, removing sources not relevant to the U.S. context or that did not deal with ethics education or an associated theory. Ultimately, the authors identified sixteen publications that (1) were set within the U.S. military context and (2) related specifically to ethics education or training. This review does not offer a specific theoretical perspective on U.S. military ethics education; rather, it seeks to explore the literature to identify foundational educational approaches in use and the learning theories or philosophies that may underlie these approaches as well as gaps in the literature.

This review is organized in three main sections. First, we present discussion of the underlying philosophies of ethics education influencing the selection of associated educational approaches, including acknowledgment of the differences between military and civilian ethics education. Second, we articulate the approaches in use by U.S. military educators as well as the criticisms of these approaches offered by researchers in the field. This includes the challenges present in the military ethics education literature regarding each approach in the U.S. military context, with a focus on ethical action versus ethical judgment. Finally, we conclude with an analysis of what gaps remain in the literature and associated implications for future study.



Philosophies and Theories Influencing U.S. Military Ethics Education

Ethics education, including military ethics education, draws influences both from theories of ethics and theories of learning. In the U.S. military context, there is debate as to whether the goal of the services' ethics education should be to generally increase the moral judgment/action of the individual, or to convey a set of values specific to the military context. As Paul Robinson succinctly puts it, "are the ethics required of a soldier in his or her role (role morality) the same as those required of a civilian (ordinary morality)?"⁴ He argues that in the modern military, wherein an unethical action at any level by any service member can destroy public support for a mission, there is no longer a gap between civilian and military ethics; this view is disputed by Bradley C. S. Watson, who instead argues that military ethics will always be "at least in some measure of tension" with civilian ethics and virtues.⁵ Further, Evan H. Offstein et al. observed at the United States Military Academy that this tension affected the philosophies of learning used, in that leadership sought to increase the opportunities for ethical failures among cadets to provide real-life learning opportunities, whereas in most civilian settings, clear efforts are made to reduce opportunities for failure.⁶

Seemingly heedless of the philosophical debate on differences between military and civilian ethics, U.S. military ethics trainers and instructors state that they believe the purpose of formal ethics training to be the development of individuals who have internalized values as to what is *right* (from the U.S. military's perspective) and can act on these values even in the face of contrary orders or peer pressure.⁷ Aristotelean virtue ethics provide that this type of moral action will occur if an individual is instilled with a set of *virtues* that are associated with good character. While Aristotle's moral virtues may not be the same virtues prized by the U.S. military, virtue ethics as a philosophy does not specify which virtues must be instilled or their definitions.⁸

Social Learning

According to Robinson, social learning theory may dominate when the service believes that formal training is unnecessary and instead interprets organizational values as being conveyed through "unseen and gradual influences."⁹ He also notes two major challenges to the efficacy of this approach: one from the existence of preservice values in the individual, and one from the potential for an elitist view of ethical superiority over the general public to emerge. Social learning theory would also seem to align with the virtue ethics philosophy, in that the installation of character is primarily conveyed through modeling and instruction. Many U.S. service academies have explicitly espoused Aristotle as the primary influence of their eth-



ics education programs.¹⁰ However, social learning theory would also suggest that considerable instillation of values occurs prior to entering the military; in Watson's view, "one is habituated to virtuous behavior over the course of one's entire life, until such behavior becomes automatic."¹¹ Indeed, James H. Toner observes that "ethics will be caught more often than it is taught" in the military.¹² There is also evidence that the rites and rituals common to any organization are a source of ethical development through social learning for attendees at the service academies; Offstein et al. suggest that at West Point at least some portion of the rituals they observed were purposefully crafted to this end.¹³

Moral Cognitive Development

As a contrasting philosophy of learning specific to ethics, in the Kohlberg model of moral development, individuals move through up to six stages of cognitive development regarding moral problems; these stages occur in order, and an individual might not progress through all stages over a lifetime.¹⁴ At the first two stages, the notion of *right* is mostly determined based on strength and avoidance of punishment; at the middle two stages, by laws, societal norms, and avoidance of loss or reputation; at the top two stages, by notions of universal principles.¹⁵ In this model, moral development (i.e., progression through these stages) is often facilitated through the use of moral dilemmas or conflicts.¹⁶ For trainers aiming to develop service members who are able to act upon their values in the face of a contrary order, it is not surprising to see Kohlberg as a major influence. For instance, Eva Wortel and Jolanda Bosch state that the purpose of military ethics training is to strengthen moral competence, which they define as "the ability and willingness to carry out tasks adequately and carefully, with due regard for all the affected interested, based on a reasonable analysis of the relevant facts."¹⁷ A "reasonable analysis" being the endpoint of ethics training is consistent with Kohlberg's theory, which emphasizes moral *judgment*. Kohlberg's theory is at odds with the virtue ethics approach, which he explicitly criticized as being insufficient to resolve conflicts between values. Kohlberg's criticism has been echoed in the military context by others.¹⁸ Further, Kohlberg's focus on moral judgment has been criticized as being insufficiently linked to moral action.¹⁹

Approaches to U.S. Military Ethics Education

Turning philosophy and theory into grounded functional and practical applications is not only challenging but also cause for a multitude of interpretations and approaches aimed at enhancing ethical decision-making amongst service members. As Michael Hallett puts it, "discerning, while in the shadows, the ethically



appropriate action requires robust competency development.”²⁰ Founded on the theories and philosophies described above, three principal approaches have generally been reflected in U.S. military ethics education: critical thinking, consequentiality, and deontology. While all approaches agree that ethical development is a necessity for military service, how that aim is achieved varies profoundly. Matthew Beard notes that “what remains to be seen is what form it should take in order to achieve this goal.”²¹ These distinct approaches reflect the inherent assumptions for both ethics and military service contained within.

Critical Thinking-Aligned Approaches

Critical thinking approaches have been the predominant method utilized by the U.S. military. This approach focuses on the individual service members and their evolution as critical and ethical thinkers by developing a foundation of critical thinking capability and ethical dilemma experience to expand *cognition*. This is generally accomplished through a comprehensive educational experience incorporating case studies or “sea stories,” ethical theory reading and background, collective discussion, and a personal mastery attained by the instructor or trainer, through train-the-trainer.²² Deane-Peter Baker provides a strong example of this style of exercise at the U.S. Naval Academy, wherein *theory of the week* ethics classes for cadets are jointly taught by civilian moral philosophy experts and military instructors with command experience. He names this exercise “ethical triangulation,” wherein multiple ethical philosophies are applied to real-life scenarios.²³ Offstein et al. also found strong evidence of independent triple-loop learning among West Point cadets, wherein these cadets consciously reflected on deep-seated assumptions impacting ethical decision-making; this reflection was found to occur in social interactions between cadets outside of formal classrooms.²⁴

Proponents of this approach espouse critical thinking as the first step for those with no other moral grounding in developing personal ethics. Developing moral and ethical foundations by learning “to reason wisely and well” enables decision makers to approach each unique situation with the ability to determine the most ethical course of action regardless of precedent.²⁵ The challenges of combat and ever-changing military environments demand “robust competency development.”²⁶ Toner utilizes the “sword and shield” concept to illustrate virtue ethics and critical thinking as a means to safeguard service members from the harsh realities of war and thereby remove any prospective ethical failures.²⁷ Furthermore, the development of critical thinking as a virtue supposes that character is essential for its own sake; a virtuous soldier is a virtuous person.²⁸

Certainly, virtue ethics and critical thinking-aligned approaches have been the predominant underpinning for U.S. military ethics education, yet by no means is this a



universally accepted standard. Detractors enumerate several prospective flaws in this approach, including the requirement for a service member to clearly grasp ethics and the ability to exercise effective critical thinking, as well as assuming critical thinking skills as simply a by-product of higher education and therefore easily instilled in such environments.²⁹ This need for higher education enables the susceptibility to elitism, where only the officer corps (those required to obtain such advanced degrees) are pre-supposed as capable of critical thinking and therefore ethical decision-making.³⁰ Further, in a virtue ethics system, which virtues or values take precedence in competing situations is at the discretion of the individual and/or service.³¹ Each military service has identified a finite list of values by which it inspires and informs its constituents, and each service's values differ from the others. Furthermore, Roger Wertheimer warns that such personal interpretations are intrinsically susceptible to perversion by politics, public opinion, and personal bias (moral relativism or subjectivism).³²

Consequentiality-Aligned Approaches

The consequentialist approach utilizes an objective, heuristic, practical model as a foundation for developing methodologies for instruction. Often reflected in the use of compliance lists, rote memorization, and pocket checklists, the consequentialist approach focuses on codified laws, rules, and regulations as determinants for ethical decision-making, thereby removing the individual's subjective cognition from the equation with the purpose of providing ethically consistent *action*. This approach focuses on the consequences in decision-making (i.e., the ends versus the means), addressing both individual rule-breaking decisions as well as larger professional ethical dilemmas.³³ It is generally inculcated via classroom lectures, rote memorization, repetition, behavior modification, and conditioning.³⁴ This approach presents a faster, mass approach to developing ethical behavior within the services. Pocket checklists for ethical behavior remove the individual from the equation, thereby eliminating any supposed hidden osmosis and personal interpretations of situations, built from an assumption that "a professional military ethic must be objective."³⁵ The removal of individual subjective interpretations hearkens to the rules-based utilitarian moral philosophy that ethical decisions are evaluated on their expected favorable and unfavorable results.³⁶ From a professional standpoint, the Uniform Code of Military Justice and other military rules and regulations provide clear sanctions for ethical failures.³⁷ As for the pedagogical and andragogical perspectives, this approach views senior leadership and training as a method by which teachers or trainers are expected to convey knowledge and experience. Offstein et al. articulate the primary purpose of approaching ethical training from a consequentialist approach as being to provide ethical clarity in times of personal and professional confusion, particularly in high-stress environments such as combat.³⁸



Critics of consequentialist approaches argue that such reliance on rules and regulations limits the moral and character development of service members. Kenneth Williams maintains that ethical, moral, and character development require dialogue, interactions, personal investment, and practice resolving ethical dilemmas that cannot be enabled via the presumption of black-and-white answers to ethical dilemmas.³⁹ Watson argues that “there are universal obligations that are nonsubjective, nonrelative, but they may conflict with one another; how these obligations are to be obeyed depends on the circumstances.”⁴⁰ This presumption of simplistic moral absolutes fails to reflect ethical dilemmas involving competing values, ethical judgment, and experience and assumes an inability amongst service members to demonstrate critical thinking. Considering Kohlberg’s model of moral development, the consequentialist approach risks failing to develop service members who act ethically regardless of conflicting dictates and will not enable service members to make ethical decisions when in conflict with orders or peer pressure.⁴¹ Service members may find themselves asking if the ethical decision is worth the cost demanded by a superior or comrades. This cost analysis may result in an action contrary to the service’s intended moral calculus.

Deontologically Aligned Approaches

Deontological perspectives impose a focus on honor, duty, and purpose. “Duty ethics implies we should be able to stand by the decisions we make with a sense of integrity and commitment, regardless of the consequences.”⁴² This functional approach, which assumes an inability for critical thinking, redirects to focus on the naturally collectivist nature of the Armed Forces. This reinforcement of the collective ideals over individualism utilizes exhortations to act in accordance with the integrity and character of the archetypal soldier, sailor, airman, marine, or coast guardsman. Situation-specific challenges are recognized; therefore, a set standard of behavioral responses is not provided. Members are encouraged to view ethical dilemmas from the lens of their service archetype rather than their own individual ethical decision-making—for example, “Be a Marine.” This approach utilizes archetypal ideals and reinforcement of the concepts of honor and integrity.⁴³ The foundational aspect of this approach lies in the notion of honor as a key virtue of service, wherein “the high-minded person is concerned with the greatest of external goods—honor.”⁴⁴ Betrayal of this archetypal honorable ideal is considered a shameful act. Utilization of this concept as an ethical foundation enables services to hold their members to a set standard while still reflecting unique situational experiences, *action* and *cognition*.⁴⁵ A relative one-size-fits-all concept of honor is therefore intended to protect “the soul of the military profession.”⁴⁶ Beard, and Wortel and Bosch state that this honor-bound component enables service members to evaluate ethical dilemmas re-



ardless of legality and, if necessary, in direct conflict with a superior's orders.⁴⁷ To do the *right* thing is in keeping with a nebulous warrior's code. Additionally, this approach removes the requirement for virtuous *people* because it only requires virtuous *soldiers*. John W. Brinsfield references Gen. Douglas MacArthur, who argues that soldiers need only be virtuous in so far as they keep to their duty (regardless of personal virtue).⁴⁸ The vices they exhibit in their personal lives, such as alcoholism or adultery, are irrelevant to their duty and honor as a soldier, sailor, airman, marine, or coast guardsman: a significantly more realistic portrayal of the expectations service members might be held to in defense of their Nation.

As with the previous approaches, deontologically aligned approaches have their share of denigrators. Robinson notes that this approach makes the supposition that instilling the rank and file (namely, enlisted) with moral philosophy is a waste of time and effort, compounding a belief of critical-thinking inability.⁴⁹ Furthermore, this approach presumes that within the U.S. military, or at the very least within each service, there exists a firm and cohesive perception of the honor-bound archetype, allowing for no variance in the discernment of what it means to be a soldier, sailor, airman, marine, or coast guardsman.

Challenges in U.S. Military Ethics Education

Regardless of the approach to ethics education utilized, there exist several overarching limitations facing U.S. military ethics educators. The U.S. military exists as a rules-based compliance organization and, as such, ethics education is approached from a doctrinal perspective where one size fits all. This need for one *best* answer exacerbates the divisions amongst proponents of the aforementioned approaches as to which provides the appropriate means to develop ethical decision-making. Determining which approach best meets the needs of military service is met with the challenge of measurement. While ethical failures are often high-profile, ethical dilemmas met with success are difficult to identify and subject to causal interpretation through the lens of any of the described approaches. Further, when faced with ethical dilemmas, it is difficult to determine whether personal ethical development or military-instilled ideals resulted in any given action. Finally, the extenuating circumstances military service members face, particularly in combat, are fundamentally difficult to reproduce in a learning environment and therefore compound obstacles in measurement.

Debates abound as to what can be taught versus what is ingrained (learned prior to service). Military service gets "a microcosm of America, good, bad, and indifferent."⁵⁰ Toner, an experienced military ethics trainer himself, argues that U.S. military ethics education too often fails to acknowledge that service members come equipped with preexisting values.⁵¹ From his perspective, the approaches used presume the



need to build from the bottom up, as though the service members are a blank slate. He argues that effective ethics training can only occur if we presume that service members already have the capability of ethical judgment and some ability to differentiate between right and wrong. He does note, however, that we cannot assume that they will have superior ethical judgment after training.

There is also some debate as to whether the ethics construct of the *good man* is a valid one, or whether virtue is inherently situational and dependent on external factors. This provides an obvious challenge for U.S. military ethics education, particularly that which is heavily influenced by Aristotelean virtue ethics. However, George R. Mastroianni cautions against overreliance on situational ethics in the development of service members, in that it leads to a perception that the *situation* is responsible for an ethics failure, thereby absolving the *individual*.⁵² He also recognizes that ethics training for service members must consider the stress of combat situations and attempt to counter it; his suggestion is a greater emphasis by military leaders on *visibly* modeling ethical behavior and the construction of environments to build muscle memory for all service members. Offstein et al. describe this same concept in West Point's policy of increasing opportunities for temptation to increase ego strength by continuous resistance.⁵³ The learning goal is thereby transformed from the installation of a specific virtue to the building of an ethical reflex, which is strong enough to engage even under the heavy pressure of a military environment.

Discussion

Considering the size and complexity of the U.S. military, in approaching this review, the authors were cognizant of the potential for differences to exist between the services. Ultimately, while we did not find significant differences, of the ten empirical studies reviewed, we note that five dealt with the U.S. Army; no other service had more than two related studies, and the U.S. Marine Corps had none. This suggests the possibility that if differences do, in fact, exist between the services, in educational philosophies, teaching approaches, or their resulting efficacy, additional empirical studies specific to each service would need to be undertaken to identify said differences. Given the popularity of surveys as the methodological approach taken in the research reviewed, we wonder what potentially interesting results might be revealed by extending these same surveys to additional services. Furthermore, given the unique nature, size, and mission, as well as its separation from the Department of Defense into the Department of Homeland Security, we also wondered if the U.S. Coast Guard should be analyzed as uniquely different from the other military services, or does military service encompass any combat-ready uniformed service?

As described above, the bulk of research in U.S. military ethics education is targeted toward the service academies, the primary entry point to military service



for many future officers. However, it is just as compelling to consider how the ethical values conveyed during initial entry to service are reinforced and evolve over the course of an entire military career. Further, there may be significant differences in the theories and approaches used in continuing ethics education, especially considering the demographic differences between the young adult entrants and the older career service men and women. For instance, as noted above, there is a clear Kohlbergian influence on service academy ethics education; however, the ultimate Stage Six ethical judgments posed by Kohlberg's developmental model are not necessarily consistent with the ethical values espoused by the U.S. military (which generally holds a Stage Five utilitarian orientation) and, therefore, may be less philosophically appropriate with increases in rank. Hence, it may be that postentry ethical training and development activities are less commonly rooted in a Kohlbergian developmental philosophy—a hypothesis that would need to be confirmed by empirical study.

Finally, we noted that the studies presented focused heavily on the ethics training of U.S. military officers versus the enlisted ranks. This contextual focus by researchers likely stems from the assumption that the officer corps is the bastion of military professionalism and thereby ethical decision-making. Watson notes that officers are generally considered a profession, in contrast to enlisted men and women; professionalization brings with it a notion of professional ethics, often conveyed through formal codes and training mechanisms.⁵⁴ Indeed, the Uniform Code of Military Justice includes a legal violation titled “conduct unbecoming,” specifically reinforcing this notion that to behave ethically as a representative of the military is a mandate of military professionalism, yet the law only applies to officers.⁵⁵ This focus on the ethics training of officers is not unexpected, given that the service academies are an obvious site of professionalization with formal ethics training programs available for study, and a result of the expectation that officers are responsible for instilling values in the enlisted ranks. However, there may be considerable value in studying the methods by which ethical norms are instilled in the enlisted ranks, including study into the efficacy and consistency of value transfer from the officer corps and senior enlisted.

Conclusion

Providing service members with the tools and knowledge to navigate the unique ethical dilemmas faced in military service is imperative to maintaining the national confidence in the professionalization of the U.S. military. As Hallett puts it, “warriors must conduct ethical decision-making ... in poorly illuminated ethical environments, characterized by chaotic situations in which individuals must deal with other impassioned individuals through the filter of their own passions.”⁵⁶



While many of the foundational theories and philosophies that inform military ethics education are universally appreciated, the method and approach by which these are practically applied is still deeply contested. Regardless of the approach, service members are still held to the highest of ethical standards and are both expected and exhorted to act in accordance with them. ❧

Notes

1. Roger Wertheimer, "The Morality of Military Ethics Education," in *Empowering Our Military Conscience: Transforming Just War Theory and Military Moral Education*, ed. Wertheimer (Burlington, VT: Ashgate Publishing, 2010), 255.

2. In 1968, during the Vietnam War, U.S. Army troops massacred unarmed civilians in the village of My Lai. In 1991, U.S. Navy and U.S. Marine Corps officers allegedly sexually harassed and assaulted more than one hundred fellow officers at the Tailhook Association Symposium held annually in Las Vegas. During Operation Iraqi Freedom, circa 2003, U.S. Army and Central Intelligence Agency members were found to have committed human rights violations against detainees in the Abu Ghraib prison. For further details on the Fat Leonard scandal, see Craig Whitlock, "Admiral, Seven Others Charged with Corruption in New 'Fat Leonard' Indictment," *The Washington Post*, 14 March 2017.

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Using Digital Textbooks to Improve Student Learning

Lessons for Military Educators

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Abstract

Interactive digital textbooks designed using learning theory can improve student learning. Professors at the United States Military Academy have been using interactive digital textbooks to improve student learning for multiple years, and their lessons will benefit other institutions. This article describes the difference between interactive and noninteractive digital textbooks, reviews the history of previous learning technologies, and provides a summary of how people learn. Most importantly, the paper discusses how the West Point interactive digital texts were designed based on learning theory and how they were assessed for effectiveness, and it provides notes of caution to other educators seeking to use interactive texts.

In 1913, Thomas Edison said, “Books will soon be obsolete in the schools.... It is possible to teach every branch of human knowledge with the motion picture. Our school system will be completely changed inside of ten years.”¹

Despite Edison’s bold prediction, motion pictures never came close to replacing books, and their impact on education—while significant—was far from revolutionary.² Since the creation of motion pictures, other technological innovations have been developed. Each time, proponents hailed each innovation as having a revolutionary effect on education; however, each time, these bold predictions failed to materialize, and these technological advances played only “a supplementary means of presenting instruction.”³ Despite being centuries old, books remain among the most pervasive learning tools.

Computers, tablets, and other internet-connected smart devices are the latest technological inventions that may “revolutionize” the education community. However, the question remains: Can they truly enhance student learning? Although it is too early to answer with certainty, data indicate that interactive digital textbooks designed using learning theory can significantly improve student learning.

Over the past several decades, the number of credit hours dedicated to military science at West Point decreased from 8 to 4.5. As a result, West Point's Department of Military Instruction investigated innovative ways to maximize learning and teaching effectiveness. The department's solution was to create a digital military learning environment comprised of interactive digital texts as the foundation for multisensory and integrative instruction, improved interactivity, and asynchronous instructional support systems.

How Interactive Digital Texts Differ from Traditional Texts

As the well-known idiom says, a picture is worth a thousand words. This idiom captures a key concept in which a single image can convey a complex idea; thus, authors have always looked for ways to portray ideas in ways better than words alone. Textbooks have been one of the foundations of instructional techniques since ancient Greece and have been widely available since the invention of the printing press.⁴ Just as other earlier technologies, such as the photograph, allow for a picture to replace sketches or "a thousand words" in printed texts, we are currently in a period where authors are experimenting with technology to augment text through multimedia and interaction to enhance learning.

It is important to differentiate noninteractive from interactive digital texts. Digital text is nothing more than a paper book that has been digitized into an electron-

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ic book (e-book). While early research has shown a slower reading rate with digital text, displays have now advanced to the point that there is no difference.⁵ Studies also indicate that another perceived advantage of an e-book over its print version is the ability to search for a particular word or words.⁶

Interactive digital text incorporates activities performed “by both the learner and the computer” to enhance the user experience and contribute to long-term retention.⁷ In contrast to an e-book, an interactive digital textbook exploits the multimedia and modality principles to enhance learning.⁸ The multimedia principle states that images and words used together are more effective than words by themselves.⁹ The modality principle states that the use of auditory and visual stimuli together are more effective than only visual or auditory stimuli.¹⁰ The combination of text, visual information, and auditory information all presented within an interactive digital textbook yielded profound improvements in learning versus e-books or other less sophisticated presentations.¹¹ As opposed to merely flipping or scrolling to the next page, the interactive digital textbook’s features allow the reader to select those that best enhance the learning style required for the specific subject. Whereas e-readers and e-books are textbooks on a screen, interactive digital texts make full use of technology to create meaningful learning experiences. Interactive digital texts provide instructional designers with the tools necessary for full lessons to exist in the digital space, supported by similar methods used in the classroom. Multimedia, modality, and interactivity support and reinforce mental schema development and thereby increase cognitive understanding and retention leading to learning transfer.

Technology and Learning

Using new technology to improve classroom learning dates back to the early part of the twentieth century when schools used visual aids, such as films and lantern slide projectors, to enhance classroom instruction. While the use of “visual instruction” greatly expanded in the 1910s, it never came close to making the impact predicted by Edison.¹²

The development of sound recordings, radio broadcasting, and motion pictures with sound in the 1920s and 1930s led to the “audiovisual instruction” movement. Like Edison nearly two decades earlier, “many audiovisual enthusiasts were hailing radio as the medium that would revolutionize education.”¹³ Despite these bold predictions, the radio has had “little impact on institutional practices.”¹⁴ The U.S. military was one of the first institutions to use audiovisual media as primary teaching tools. With the onset of World War II, the military needed to substantially increase its teaching capacity. Lacking time and trainers, the military leveraged technology to produce more than six hundred filmstrips and four hundred training films from mid-1943 to mid-1945.¹⁵



Television was the next technological breakthrough in the audiovisual instruction movement. In the 1950s, there was an “increased interest in television as a medium for delivering instruction,” but much of the interest abated by the mid-1960s.¹⁶

By the early 1970s, “the terms *educational technology* and *instructional technology* began to replace *audiovisual instruction* as the terms used to describe the application of media for instructional purposes.”¹⁷ Computers would become the next technological invention to capture the attention of educators. While work on computer-assisted instruction started in the 1950s, it was not until the development of microcomputers in the 1980s that saw widespread use of computers in the classroom. Soon, proponents once again argued that this technology would revolutionize instructional practices.¹⁸ Renowned professor Seymour Papert argued that the computer would be “a catalyst of very deep and radical change in the educational system.”¹⁹ Yet, in the 1990s, the impact seemed to have been quite small. Surveys of American schools indicated that despite having one computer for every nine students, most teachers reported “little or no use of computers for instructional purposes.”²⁰

With the release of Apple’s iPad in 2010, the first widely used tablet, teachers and instructional designers began to reevaluate the usefulness of computers in the classroom.²¹ Combining tablets and smartphones with ever-expanding Wi-Fi and cellular networks allowed users constant internet connection and offered new opportunities for learning.

How People Learn

There is no universally accepted definition of learning; however, one that captures the criteria and is widely accepted by educational professionals is “an enduring change in behavior, or in the capacity to behave in a given fashion, which results from practice or other forms of experience.”²²

Constructivist philosophy informs much of the modern learning theory. In contrast to the instructionist view of education popularized in the early twentieth century, constructivism maintains that learning is not memorizing facts or processes but the “active creation of mental structures.”²³ The learner creates mental models called “schema” that internalize experiences from the physical world and provide the cognitive basis for knowing as well as future learning. Schemas are built upon and derived from interactions between people, their environment, and the resulting interpretation and internalization of those interactions.²⁴

The phenomenological concept of situated cognition is related to constructivist philosophy. This concept posits that people make sense of the world through direct perception of possible interactions with the environment.²⁵ Situated cognition emphasizes the particular context in which people perceive and integrate stimuli into



their mental frameworks. The experiences are embedded in and influenced by both a person's mental frameworks and the nature of the environment.

These philosophical concepts yielded numerous educational theories and methods. Each varies in its interpretation and application of constructivist thought; however, any learning theory founded on constructivist principles aims to provide learning experiences, which build effective mental models that can transfer learned behavior to application in the real world.

People learn better when they engage in active knowledge construction.²⁶ Key to knowledge construction is experience and understanding. The interplay of experience, understanding, and reflection drives knowledge construction in modern learning theory. John Dewey states in his seminal work *Experience in Nature*, "Events turn into objects, things with a meaning ... [that can] be infinitely combined and re-arranged in imagination ... [and are, therefore] infinitely more amenable to management, more permanent, and more accommodating."²⁷

David Kolb's experiential learning theory (ELT), one of the best-known modern learning theories, focuses on the process by which experience becomes knowledge. According to ELT, knowledge results from the combination of grasping and transforming experience.²⁸ The ELT model portrays two modes of grasping experience—concrete experience and abstract conceptualization—and two modes of transforming experience—reflective observation and active experimentation.²⁹ The modes of the ELT model are cyclical in that the concrete experience creates opportunities for reflection. Students internalize their reflection, building mental models through abstract conceptualization. Active experimentation tests new mental modes that yield new concrete experience. The ELT's cyclical nature allows individuals to build, test, and refine mental models and translate cognitive behaviors into real-world application.³⁰ The concrete learning experiences that emphasize learning with understanding help facilitate an effective transition from abstract conceptualization to active experimentation.

Just as education philosophy shifted from an instructionist to a constructivist perspective, so too has our understanding of what constitutes important educational outputs. While domain-specific knowledge remains necessary for expertise, understanding how that knowledge is used is also of equal importance.³¹ By grounding learning experiences in an applicable context and demonstrating how domain-specific knowledge is used in that context, people are able to build better mental models.³² Difficult concepts and domain-specific knowledge are even more challenging to grasp if devoid of context. Though it is possible to understand how to apply specific information about a particular weapon or piece of equipment, it is much easier if one comprehends the item's purpose and how it works. Learning experiences that focus on developing understanding as opposed to rote memorization yield more robust mental models that are easier to apply.³³

The methodologies undergirding the concept of instructional design are experiential learning and learning for understanding. There are countless ideas addressing how best to design learning experiences; however, a few stand out for digital textbooks. The



multimedia principle states that people learn more effectively from a combination of text and pictures as opposed to only text.³⁴ This concept is not new, as writers have combined text and visuals to enhance connections and improve understanding for centuries. Classroom techniques, such as the use of a whiteboard, also apply the multimedia principle. Multimedia reinforce mental model construction and can provide additional connections not possible with text alone.³⁵

The modality principle states that people learn far better from a combination of visual information (text and images) and audio information than from visual information or audio alone.³⁶ The modality principle manipulates cognitive load by spreading the load between visual and auditory processing channels.³⁷ The brain processes more information but is not cognitively overburdened because the load is divided. The eventual integration of visual and auditory information enhances mental model building and retention.³⁸

Instructional interactivity is defined as “interaction that actively stimulates the learner’s mind to do those things that improve ability and readiness to perform effectively.”³⁹ This is not merely being able to manipulate elements of the learning environment, but it instead involves interaction that provides context, a challenge that drives some action or activity, and feedback that provides a means for understanding the action taken and its results.⁴⁰ Applying skills purposefully to a simulated or contextualized environment begins the process of active experimentation and testing of mental models built during a given learning experience.

Most theories also share principles that are believed to enhance learning from instruction: “learners progress through stages/phases; material should be organized and presented in small steps; learners require practice, feedback, and continuous review; social models facilitate learning and motivation; and motivational and contextual factors influence learning.”⁴¹ These principles correspond to the instructional factors that have been shown to be most important in learning experiences: organization of material to be taught, presenting information in small units that can be cognitively processed, providing opportunities for practice, establishing the provision of corrective feedback, and conducting frequent review sessions.⁴² Each of these factors supports the mental model construction and thus long-term retention and retrieval.

West Point’s Department of Military Instruction (DMI) applied the theories of learning, the principles of instruction, and current developments in learning technologies to create an innovative new way to teach military students.

West Point’s Military Science Textbook

The DMI sought to enhance student learning by developing interactive digital textbooks that incorporate learning science with the latest advancements in instructional technology. This effort produced the Military Science interactive digital textbooks. The



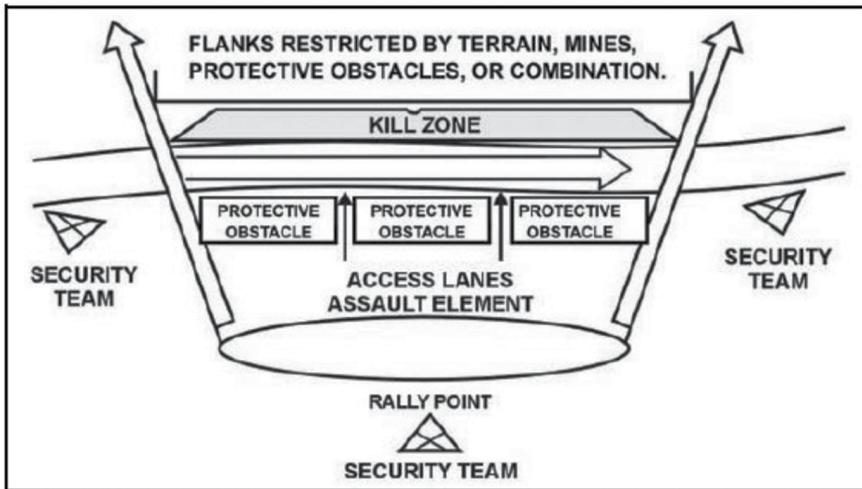
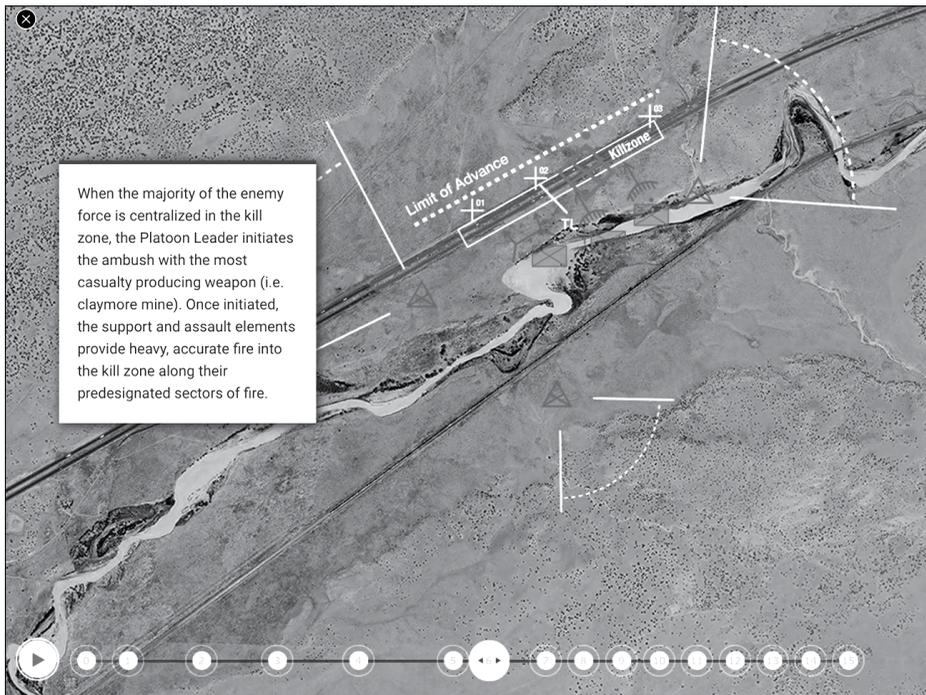


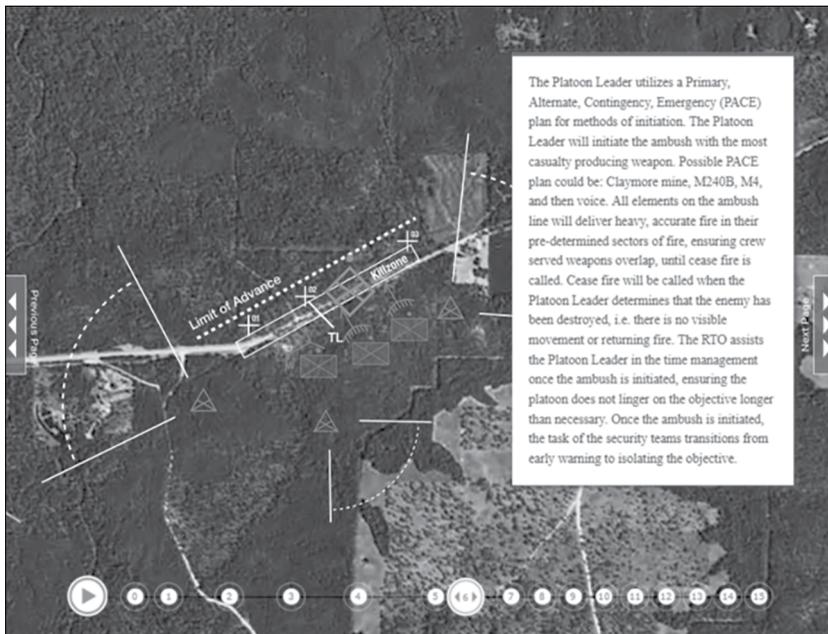
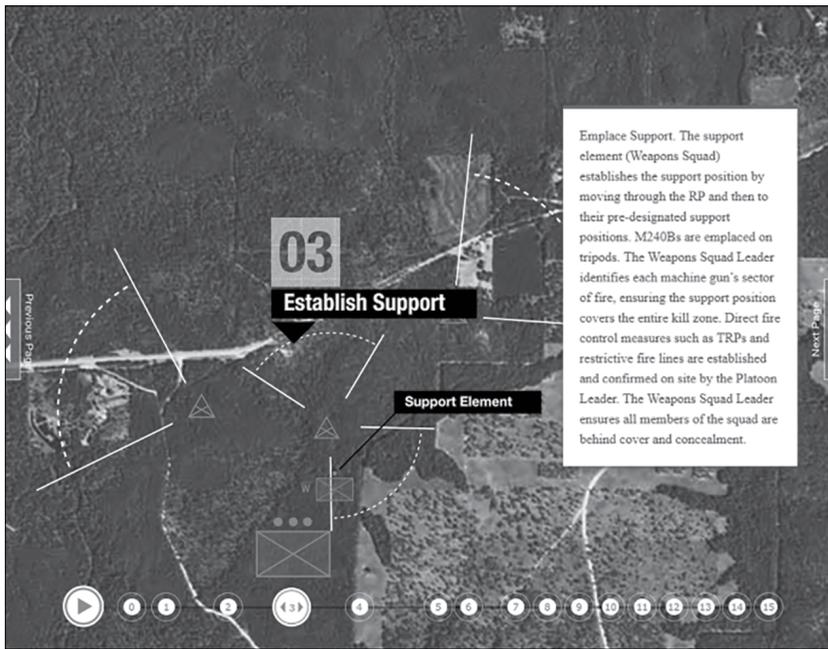
Figure 9-6. Linear ambush.



(Figure by Maj. John Spencer)

Figure 1. Field Manual Image versus Digital Text Image





(Figure by Maj. John Spencer)

Figure 2. Ambush Multimedia Widget



textbooks added multiple interactive features to maximize the effect of multimedia and modality principles and supplement text with assessments and vignettes.

In the past, cadets in Military Science classes (or students throughout the Army) received stacks of field manuals as their primary textbooks. These manuals were not engaging and did a poor job of helping cadets, who possessed little to no experience in the subject, form an adequate understanding of the material. With a mix of knowledge to be memorized (weapons specifications, steps of troop-leading procedures, etc.), rote procedural information (execute a platoon attack, execute an ambush, etc.), and rough illustrations, cadets struggled not only to understand the subject but also to understand what was important and why.

The first step in building an interactive digital textbook was to create an enhanced presentation of text and imagery. The DMI not only transferred all the information from field manuals that was used in the classroom but also provided significant enhancements to maximize the effects of multimedia and modality. Many existing images and diagrams within the manuals were decades old, black and white, and often very poor at conveying the material (see figure 1, page 23). Rather than the picture replacing “one thousand words,” it effectively replaced zero. Thus, images and diagrams needed to be wholly redone. Creating quality images was important, as research shows that students learn better by creating the necessary mental models from words *and* pictures rather than words alone.⁴³

The next step was to create multimedia and interactive content that takes full advantage of the unique aspects of the digital medium. Examples of different interactives include three-dimensional weapons that can be fully disassembled and assembled; two-dimensional graphics with moving icons (using military symbols) that are played with clicks and finger swipes to depict the ambush, raid, and patrol base; three-dimensional videos of an ambush or patrol base; decision-focused problem sets for tactical missions; vignettes; and interactive assessments.

Mixed-media elements take advantage of the multimedia effect to enhance learning through a combination of text, images, videos, and animations. Learners engage with multimedia content that builds on text, improving connections and explicating complex information in more intuitive ways. The Military Science digital texts stand out in their multimedia design in both their aesthetic, which is uncluttered to reduce extraneous cognitive load, and their function. Learners can control their multimedia experience by manipulating content or maneuver within the interactive text as they deem necessary. Using the sequence bar at the bottom of a widget, such as the one shown in figure 2 (on page 24), the learner can control their interactions to play or replay as desired based on their speed of learning.

Interactive elements in the digital texts supplement multimedia by presenting contextually relevant situations, challenging learners to apply knowledge to solve a problem. As illustrated in figure 3 (on page 27), the learner must choose a course of action and then see how the enemy reacts. Interactive assessments provide in-depth



feedback and structured reflection to support learners as they attempt to integrate new information. Unlike simple checks on learning common in e-learning environments, the Military Science digital textbooks interactives provide detailed feedback based on the learners' choices. Whether they answer correctly or not, learners receive feedback that helps clarify their understanding. Three to five multimedia elements and deep interactives per chapter were built into the Military Science textbooks all supported by updated Army doctrine and core digital functionality like the ability to search, highlight, and take notes.

Next, DMI needed to create elements that build on learning from each chapter; specifically, the function to use the new information in real-world settings or problems. The opportunity to use newly acquired knowledge in the Military Science digital texts is a significant difference between it and a noninteractive e-reader or a paper field manual. Interactive elements force learners to use critical concepts from the chapter.

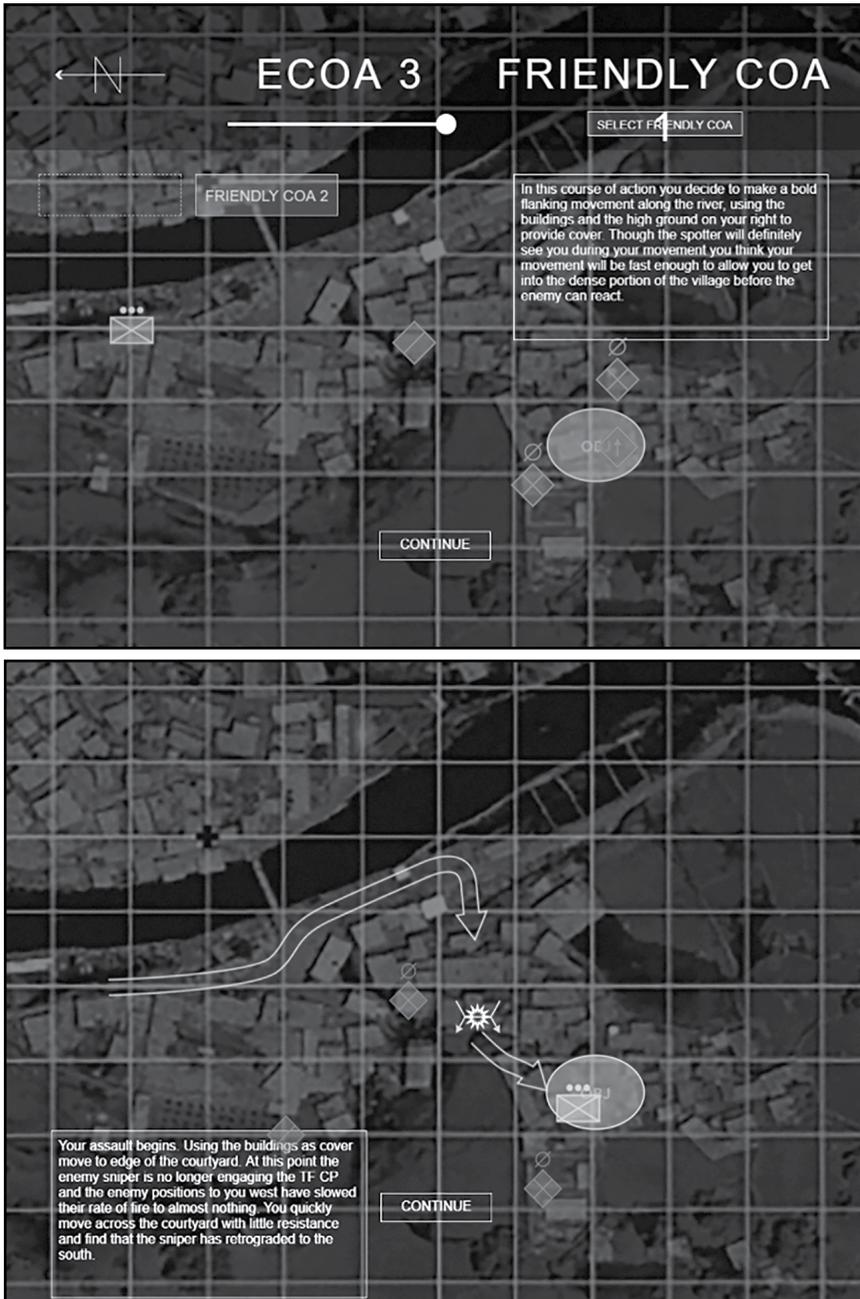
As illustrated in figure 4 (on page 28), learners must choose the correct weapon to engage a target. This interactive digital text provides the reader with the size of the target, the distance to it, and an image showing where it is located on the ground. To choose correctly, learners must recall the information presented earlier in the chapter and apply it to the situation. In this example, the learners will need to apply their knowledge of weapons' ranges and choose a weapon that will be able to place effects on the target at the specified range.

As opposed to merely memorizing a weapon's range, learners are guided to understand why range matters. Applying the information adds concrete meaning to a weapons range, which contributes substantially to model creation. Similarly, the application starts the process of active experimentation, and it suggests how the future transfer of this information will look.

Finally, the DMI recognized the need for learners to engage in reflection as the primary means to integrate new information learned in the interactive digital texts. To accomplish this, multimedia elements and interactives were designed to offer the learner opportunities for guided reflection (shown in figure 5, page 29). In many widgets, learners are asked to reflect on the multimedia presentation or the interaction they have just experienced by answering guiding questions. These questions build on each chapter's learning objectives and help to organize and contextualize recently learned information. The interactive digital texts capture a cadet's guided reflection and allow instructors to recontextualize, reframe, or reinforce student's thoughts on the material both as a means to ensure correctness and as a fluid entry or reentry into key lesson objectives.

The Military Science digital texts are designed to provide meaningful and memorable experiences based on core military competencies, including weapons, planning techniques, and tactics. The integration of authentic environments, problem-solving, and simulations, as well as a focus on the implications of the instruction to a cadet's life and a future career, collectively contribute to improved learning. Each module puts the learner in a particular context that simulates the real-world situations where that knowledge might be





(Figure by Maj. Jake A. Miraldi)

Figure 3. Barg-e Matal Vignette Interactive



This enemy soldier is near the buildings 350m in front of your position. Which weapon provides the best way to engage this threat?

- M240B
- M4
- M320

CORRECT

This weapon provides both the range and the area effects needed to engage this enemy. With a maximum effective range of 800m on bipod this weapon is well within range to suppress or destroy the target.

NEXT

(Figure by Maj. Jake A. Miraldi)

Figure 4. Interactive Assessment



Characteristics of the Defense:

- Disruption
- Flexibility
- Mass and Concentration
- Operations in Depth
- Maneuver
- Preparation
- Security

The characteristics of the defense above define what makes for successful defensive operations. The Chinese mobile defense technique uses a combination of disruption, flexibility, maneuver, preparation, and operations in depth to reduce enemy combat power before the main battle area.

Click on a characteristic to see its definition below.

What key elements of this technique enhance flexibility, maneuver, and operations in depth?

Write your answer here.

Preparation is key to this technique. Why?

Write your answer here.

Given your understanding of this threat doctrine what are some of its weaknesses? How might you defeat this technique?

Write your answer here.

SAVE PDF

(Figure by Maj. Jake A. Miraldi)

Figure 5. Guided Reflection

used. Through situated cognition, learners not only recognize the real-world implications of what they learn but also retain the information better. The goal was to develop learning with understanding to allow for the use of information instead of simple facts.

Digital Textbooks That Can Support Teaching Pedagogy

By using the DMI interactive digital textbooks as a foundation for a digital learning environment, military educators are able to teach more pertinent information, enhance retention through mixed-method learning, and engender greater student commitment, motivation, and understanding. When students experience military knowledge and principles applied in context, they are better able to integrate that experience and carry the knowledge forward to their next learning experience.

The interactive digital textbooks provide instructors with a standard textbook across the Military Science curriculum and the means to facilitate and enhance classroom instruction. Through digital text modules built on instructional design principles, cadets better understand the core tenets of what they learn and arrive in class better prepared



to engage with the material in a more nuanced way. Since cadets who use the interactive digital textbooks have higher rates of initial understanding than those using traditional textbooks, instructors may choose how to teach their class to reinforce that understanding. Instructors may also use more sophisticated teaching techniques like project-based learning or other applicative instruction to provide additional context to the knowledge gained while using the digital texts.

The interactive digital textbooks also provide instructors with visuals, vignettes, and other content or functions. Because it is currently available on any operating system with an internet connection, instructors are able to project content from the digital textbooks onto a screen in class to review information, access an out-of-class reading, or serve as the basis for in-class instruction. As the interactive digital textbooks and the digital learning environment continue to expand, more and better options will be available for instructors to incorporate into their lessons. Instructors will have access to more vignettes, both historical and more recent, as well as playable scenarios and other interactive content that can provide engaging primers to instruction or the foundation for classroom instruction itself.

Instructors can take advantage of these resources to incorporate real-world applications into their courses, a strategy that promotes learning and long-term retention.⁴⁴ For example, a video interview with a combat medic from a well-known battle at the end of a medical tasks lesson can provide learning benefits.

By facilitating different types of instruction, the interactive digital textbooks allow instructors to experiment with more nuanced and improved teaching methodologies. Instructors will not have to spend significant preparation time in creating learning experiences from scratch and instead will have that time to build better lesson plans based on reliable, interactive content. The combination of improved learning outside of class and improved instructor flexibility in class will yield engaged and motivated students and instructors.

Assessing Digital Textbook Effectiveness

Though the literature on the overall effectiveness of interactive digital textbooks across the field is fairly limited, the existing quantitative and qualitative data has shown that using digital textbooks can significantly improve learning.⁴⁵ In particular, Amanda Rockinson-Szapkiw et al. highlighted improved levels of psychomotor and affective learning among university students through the use of digital textbooks.⁴⁶ Other studies show improved vocabulary development in younger students and support digital textbook use in an elementary school environment.⁴⁷ Hyunsun Kim and Eunyong Suh found that in a nursing school context, students improved more quickly and retained information better through the use of a mobile phone-enabled application.⁴⁸ West Point's internal data on the effectiveness of digital textbooks also bears out its effectiveness and gives credence to its digital textbook methodology.



In 2012, West Point's History Department introduced its interactive digital textbook that was developed for its military history course. West Point has been teaching military history since 1818 and has data on its "History of Military Art" course dating back to 1969. After introducing its interactive digital military history textbooks, the number of A's in the course increased by 46 percent.⁴⁹ Through surveys, 84 percent of cadets "agreed or strongly agreed [that] the new interactive e-book made the course more interesting" and "67 [percent] agreed or strongly agreed [that] the interactive e-book led them to read more and made learning easier."⁵⁰

The digital Military Science texts were only recently implemented; therefore, there is currently a lack of sufficient data to show a statistical change in student performance, but cadet surveys and qualitative feedback by instructors demonstrate a similar promise. Through end-of-course assessments, cadets have explicitly highlighted the interactive digital textbooks' influence on their overall learning. On cadet surveys, 64 percent of cadets agreed or strongly agreed that the interactive digital texts were useful learning tools.⁵¹ Cadets highlighted the texts' structure ("[It] was laid out well and useful in doing OPOORDs [operation orders]"), accessibility ("Sometimes it's better to have a hard copy but being able to have it along with you on an electronic copy is very helpful and better than a big book of references"), and content ("[It] allowed me to watch an interactive video on conducting a platoon attack as well as a platoon ambush. This helped on my [test] as well as the final OPOORD") as particularly useful to their overall understanding in the course.⁵²

The digital Military Science texts also enabled continued learning in a field environment. By using ruggedizing tablets, the textbooks were used to support field instruction where the advantages of multimedia learning were not an option previously. The texts also reinforce experiential learning during downtime between repetitions or field exercises.

Ultimately, the design of lessons within the interactive digital texts using the suite of potential multimedia, assessment, and guided reflection functions are what makes them so powerful. Functionality within the texts make them more like classroom instruction than simple text found in hard-copy books. The DMI has used instructional design principles typically reserved for the classroom to build a powerful learning tool that can be used anywhere with proven effects.⁵³

Why Not Make All Digital Textbooks Interactive?

What makes interactive digital texts more powerful than previous technological advances is the ability for interaction, as opposed to simply providing another mode to transmit information. However, the cost of producing an interactive digital text can be significant, so careful consideration should be made before investing in the development of interactive digital text. The following questions should be considered when deciding whether to invest in its development:



- ◆ **Does the subject suit itself to interaction?** If one is studying literature, there is no substitute for reading Shakespeare's *Hamlet*. A developer could digitize the book, but it would be challenging to make it interactive in a way that would enhance learning. Investing in the development of an interactive digital text might only be justified if the anticipated improvement in learning is sufficiently significant.
- ◆ **Is it scalable?** Developing an interactive textbook is an expensive and labor-intensive project, so there needs to be sufficient customer demand to justify the investment in an interactive digital textbook. A course, such as Urban Geography, may well be suited as an interactive text, but if only twenty cadets take the course each year, the cost to develop the textbook would be prohibitive.
- ◆ **How often does the material need to be updated?** One benefit of a digital book is that it can constantly be updated; it is not outdated the day it is printed. A student can purchase the text and receive lifetime updates. However, developers should consider the cost of routine edits from the onset. If the textbook is one that requires significant updates on a frequent basis, then it may be too expensive to produce.
- ◆ **Is the material free or copyrighted?** When developing the Military Science interactive text, much of the material comes from military doctrine, which is public domain. By contrast, content for the Military History text cannot be pulled from existing books due to copyright laws, so authors needed to be hired to write content.

Conclusion

Interactive digital textbooks can significantly improve student learning when designed using principles from learning theory; and West Point's investment in these textbooks for its Military Science and Military History courses have and will continue to improve student learning. The current wave of technological advances is especially promising as it ensures the textbook is only one swipe or click away from students at any given time, given that their smartphones or tablets are never far away. But it is not infallible. Caution is in order, since not every subject can benefit from interaction or justify the investment. Nonetheless, interactive digital textbooks hold enormous potential. ❧

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What Our Professional Military Leaders Need to Know

Enhancing the Professional Military Educational Structure

Jonathan E. Czarnecki, PhD

Abstract

There is renewed interest in and research on the subject of professional military education (PME), particularly concerning military officers. For example, a recent blog article asks, “Professional military education: What is it good for?” Several books, chapters, and articles have made efforts to answer that very question. This article takes a different tack. It asks, “What is it that a nation-state requires of its military leaders at the various levels of leadership (tactical, operational, and strategic)?” By implication, some educational requirements will be contextual—that is, dependent on the national culture as it affects the military; being contextual, these requirements cannot be generalized. However, this author argues there are general educational requirements for military leaders: how to think, how to make decisions, how to plan and execute plans, and how to lead. A PME curriculum that explicitly and comprehensively addresses these questions, regardless of methodology (e.g., history versus science), and that is scaled to levels of leadership, is a powerful way to apply an educational focus on making effective military strategy and policy.

Arma virumque cano. ([Of] arms and the man I sing.)

—Virgil, opening line from *The Aeneid*

A contemporary discussion of American professional military education (PME) is fraught with controversy before it even gets started. The subject itself is debatable and questionable. One can parse the term with interrogatories without being able to arrive at convincing or consensual answers. This article alone will not resolve the many questions, but it provides a point of departure for developing a theoretical map by which researchers and writers of PME can navigate

their arguments. To manage the scope of the subject matter, the article concentrates its argument and case on the American military.

This article's thesis is that the military is a profession and, as such, requires a professional education curriculum that informs and empowers the profession. The article proceeds in typical fashion to make the argument. First, it presents background on the subject of military professionalism. Second, it describes the characteristics of a military profession. Third, it describes the alignment of professional military characteristics and professional military educational subjects. Fourth and centrally, the article proposes improvements to the professional military educational structure that can enhance the connectivity between professional characteristics and educational structure. Fifth, it finishes with some observations on where PME needs to progress.

Background

The primary source on American military professionalism is Samuel Huntington's classic, *The Soldier and the State*. Huntington observes that not all soldiers are professionals; the officer corps, the key leadership cohort within the soldiery, is the part that should claim to be professional.¹ He based the claim of officer professionalism on three typical characteristics of professions: expertise, responsibility, and corporateness.² Expertise focuses on the management of violence in support of the state; education and training of officers is a major method of developing and maintaining that expertise.³ The American military officer corps cultivates these characteristics within a social environment that can be succinctly described as civilian control of the military. Taken together, these two phenomena, professional characteristics and subservience to civilian leadership, comprise the essence of Huntington's objective control theory.⁴ Over time, the characteristics have remained fairly constant, the one exception being the explicit inclusion of ethics.⁵

This is a narrow view of professionalism for two reasons. First, it ignores the professional attributes of both noncommissioned officers and civilians supporting the military; these people need to have similar expertise to officers, exert responsibility and

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accountability for their actions, and retain a sense of corporateness with respect to their actions. That being written, the remainder of this article will explicitly concentrate on the PME of commissioned officers.

Second, Huntington's separation of civil and military domains, necessary for his objective control theory, has received criticism in the current era. Not only is it presently impractical to have such separation, but such a condition also likely never really existed, at least in the American case. The most recent statement of this argument is found in Jim Golby's short Strategy Bridge essay that critiques Huntington's theory in an argument that poignantly makes clear that civil-military relations are far more constructivist and relational (actually interrelational) than envisioned by Huntington.⁶ The main point of the new perspective on American civil-military relations and military professionalism is postmodern in nature. The military is not a profession just because it says it is; rather, its professionalism is subject to reformation and renegotiation as its environment and stakeholders change.⁷

The military, like any organization or group that aspires to professionalism, must establish two social contracts: one internally among its members and a second externally with the clientele it serves. The internal social contract exchanges individual-member compliance with organizational norms and rules of behavior for the organizational provision of knowledge and status (as a professional). The second social contract, coming closest to Huntington's civilian control of the military, promises military services of a certain quality and ethic, and exchanges military acquiescence to civilian control for civilian recognition of the military as a profession. These contracts are sealed by the figurative handshakes of the participants as a form of social trust. This trust is the cement that secures in place the relationships among the contracting parties. To the extent that trust is developed or diminished directly affects the degree of professionalism afforded to the military by its external clientele.⁸ As Golby and others might argue, the relationships in both contracts are dynamic and interactive.⁹

Don Snider is most interested in the internal contract, which he notes must be regenerated from time to time as circumstances dictate.¹⁰ He observes that professional contract renewal is not assured, given bureaucratic dynamics within the military itself. Others, including Huntington, make a similar regeneration argument for external social contracts, with the executive branch, the legislature, and the public.¹¹ The need for external approval of professionalism may indeed be the most important challenge to the American military because of decades-long tension among the key parties in the contract or licensing: executive, legislature, and the Armed Forces. Huntington thought the tension issue concentrated on political power; more recently, other researchers have concentrated on expertise and ethics.¹²

One central component of the discussion on contracting and licensing of the military profession, or any profession, has to do with the professional training or education necessary to graduate and maintain *professionals* into the profession. If both the internal members and the external clientele believe that the professional



education or training is sufficient to create and maintain professionals, then the social contracts are easier to regenerate; when these beliefs are in disagreement, regeneration becomes uncertain at best.¹³ Here, as with the issue of professionalism itself, the literature on PME is long and critical.

Most of the recent work on PME questions the pedagogy from both the student and faculty positions.¹⁴ However, Gen. Martin Dempsey, former chairman of the Joint Chiefs of Staff, tried to move the discussion from the pedagogy to the subject matter itself with his 2012 white paper on the subject.¹⁵ Emphasizing the specific characteristics of the military profession, Dempsey called for invigorating training and education to take into account recent lessons learned from the two wars in which the United States had been involved (Iraq and Afghanistan). He connected this effort with a renewed commitment to what he believed were the core competencies of the profession: values, military professionalism (basically ethics, standards, and skills), trust, leadership, mission command, and jointness. Dempsey's competencies are additions to a far more comprehensive and foundational document on PME, the House of Representatives' *Report of the Panel on Military Education* (also known as the Skelton Report, and hereafter referred to as the *Report* in this article) from April 1989.¹⁶ The *Report* effectively established, by congressional direction, the military's PME system. It set out tiers of education and training, and an objective—to create a core of joint strategic leaders who could claim to be professionals. Thus, the *Report* must be considered an essential component of the external social contract between the legislature (and by institution, the public) and the military. The operationalization of the *Report's* recommendations as implemented by law is the *Officer Professional Military Education Policy (OPMEP)*.¹⁷ This policy is routinely updated to reflect specific educational and training needs for *joint* professionalization of officers; it assumes that each military service has its own service-specific standards to impart and develop expertise in service areas.¹⁸ The *OPMEP* contains very specific subjects that must be taught in PME at two levels: the intermediate (joint professional military education 1, or JPME 1) and the senior (or JPME 2).¹⁹

What one realizes when comparatively analyzing the *Report* and the *OPMEP* is a complementarity between the two: the former very broad on what should be taught; the latter very specific on the learning objectives. The legislative client of the military professional has proposed a vision for an officer who is a skilled joint strategist. The *OPMEP* provides the learning objectives and tasks to accomplish the vision. Pauline Shanks Kaurin has added a conversation discussing this connection in her 2017 article, "Professional Military Education: What Is It Good For?"²⁰ In this short but comprehensive review, she argues for a clarity of purpose for this education. Shanks Kaurin sees two possible paths: first, one of skills development for the next leadership level; second, one of intellectual development. She acknowledges the possibility of combining and mixing the two paths as an officer progresses through his or her career. This approach at least provides a base for theory. Following a similar logic to Shanks Kaurin, T. O. Jacobs and Elliott Jacques have recommended matching PME to leadership levels, a kind of



requisite education-and-experience base for each level.²¹ Jacobs and Jacques observe that the most critical leadership task at each of their three levels (operational, coordinative, strategic) is “interpreting or understanding the complexity of the environments with which it (the military) must deal, in order to provide clarity about them to the next subordinate level.”²² One necessary means of being able to accomplish this task is through education and training. At the higher levels of leadership, Jacob and Jacques agree with the *Report* that the means are more educative than training in that what is required is mastery of ways of thinking as opposed to ways of action. This blends well with Shanks Kaurin’s conclusions about mixing both approaches in a scheme of PME. I agree with these analyses and observations, and propose that we can enhance and clarify the relationship by tying in the characteristics of the military profession.

Characteristics of a Military Profession

As mentioned early in this article, Huntington’s model of military profession has three components—expertise, responsibility, and corporateness—all focused on the defining aspect of the profession: the management of violence on behalf of the state. Ethics now has evolved as a separate component; so has leadership—as witnessed in Dempsey’s white paper, among other works. These components are consistent with sociological theory on professionalism. In his literature review on professionalism, Andrew Rowland finds that while there is a lack of an authoritative definition of professionalism, there are convergent qualities dealing with skill, character, standards, and regulation.²³ These qualities, in turn, provide one with ingredients for a generalized professional education program. Any such education program should produce individuals—professionals—who are skilled at their work, who follow and work according to some agreed-upon standards, and who are able to be judged or regulated as competent professionals (or not). Implicit in this recipe is the necessity to adjust the ingredients according to the stages of the professional’s career.

The American military would argue that it does just that. There are certainly stages (by rank) in a military professional’s career. There are standards, judged by fitness reports. There are even tests required for the various stages of the profession and within certain technical fields. Evidence of skill competence in the military professional can also be found in those same fitness reports. The military’s code of “duty, honor, country” transcends the particular service that adopts these three virtues as theirs (the Army), thus forming a strong foundation for ethical behavior; it is a foundation that is further refined by a body of law (the Uniformed Code of Military Justice incorporating the international law of armed conflict) that reflects the political culture of the United States—a nation of laws, not oligarchy. So where is the problem of PME? One major issue is that the military profession’s defining characteristics have not been addressed well by the professional educational system’s structure that supports the profession.



Matching Professional Characteristics to Professional Education Subjects

Expertise (or skill), responsibility (or standards), corporateness (or regulation), and ethics make up the core professional characteristics of the American military. These provide general guidance for a professional education system that would teach the following:

- ◆ leadership in the military profession, appropriately focused by level or rank;
- ◆ methods of thinking, planning, and acting in the relevant military environments (strategic, operational, tactical); and
- ◆ defining ethics that constitute good and moral military behavior scaled to the experience and level of practice in the military profession.

This is indeed what the *OPMEP* attempts to do. The following comprises the *OPMEP* subjects to be covered in JPME:

JPME (All):

- National military strategy
- Joint planning at all levels of war
- Joint doctrine
- Joint command and control
- Joint force and joint requirements development
- Operational contract support

JPME (II):

- National security strategy
- Planning at all levels of war
- Theater strategy and campaigning
- Joint planning processes and systems
- Joint, interagency, and multinational capabilities and the integration of those capabilities²⁴

In turn, according to the *Officer Professional Military Education Policy*, these are supposed to produce the following six desired leadership attributes:

- ◆ understanding of the security environment and contributions of all instruments of national power;
- ◆ anticipation and response to surprise and uncertainty;
- ◆ anticipation and recognition of change and lead transitions;
- ◆ operation on intent through trust, empowerment, and understanding (essentials of mission command);
- ◆ ethical decision-making based on the shared values of the profession of arms; and
- ◆ thinking critically and strategically in applying joint warfighting principles and concepts of joint operations.²⁵

The *OPMEP* then spends an entire appendix delineating in great detail the ways in which the several services provide these subjects and attributes across the levels (ranks)



of the military profession. In a very bureaucratic strategy, the *OPMEP* contains enough detail for everyone, while enabling (empowering in the mission-command sense) anyone to do anything under its guise.²⁶ With such flexibility, curriculum development in the several military war colleges can proceed according to the specific needs of each institution. This is a desirable education organizational attribute, but it can be confusing in matching professional characteristics with learning objectives.

Expertise, or skill, is given ample coverage in the *OPMEP*; there is a plethora of direction on what constitutes professional expertise, with references to even more detailed guidance and direction. Standards of behavior are captured in references to ethics education at all levels, but without considering the differences in the task environments per Jacobs and Jacques's arguments. Only references to Bloom's taxonomic categories of knowledge and learning (know, comprehend, apply) change with the levels. Corporateness, or regulation, is discussed in the briefest and broadest terms as part of the primary (grades O-1 thru O-3) PME system in Appendix A to the *OPMEP*.²⁷ Ethics as a learning area clearly is directed at all levels in the *OPMEP* and appears to be the only subject area that is consistently matched with the professional characteristic.

Enhancing the Structure for Professional Military Education

The existing structure for American PME is paradoxically very detailed and very comprehensive in describing learning objectives, but only in the most general way is it matched with the professional characteristics espoused by the American military. This paradoxical situation limits the ability of external clientele to evaluate or assess how well the structure works to ensure that officers are indeed professional. This article proposes enhancing the existing structure to resolve the paradox; it would retain a generality that allows for innovation and flexibility in education to meet changing environmental circumstances and specific service needs, but it also includes sufficient detail to allow external clients of the military profession to examine and be reassured that certification and regulation of the military professionals is adequate; social trust can thereby be reinforced and increased.

The enhanced structure is based on professional competencies that are scaled to Jacobs and Jacques's functions, not to actual rank or grades; this reflects the reality that in a rapidly evolving and uncertain operating environment, responsibility and accountability, the two core values of every military officer, often render hierarchal grade/rank relationships irrelevant to accomplishing the missions and tasks of a military operation. The improved structure also accounts for environmental conditions, again relying on Jacob and Jacques's observation that the most critical leadership task is understanding, interpreting, and appropriately interacting with the operating environment.

The core of the enhanced structure would replace the desired leader attributes and subjects for instruction in the *OPMEP* with five professional competency areas,



all of which can be converted to assessable rubrics at each level. The five are lead, think, plan, act competently, and act ethically. These five are found in various guises throughout the military profession and civil-military relations literature; they are what both professional members and their clients in the public sphere expect their military professionals to do.²⁸

Leading can be placed on a continuum from personal, focusing on leader attributes; through organizational, focusing command and staff relationships; to systemic, in which the interaction of command, environment, and staff all play.²⁹ Thinking can be thought of as critical or creative, with both able to be developed within individuals. The operational level of organizational action primarily uses critical or analytic thinking; higher levels require professionals to visualize possibilities and create both problems and solutions.³⁰ Planning, a quintessential military activity, can be defined by scope, ranging from tactical to strategic, and from single service to interagency and multinational. Of the five competency areas, planning is the most comprehensive subject covered in the *OPMEP*. Acting is the decision and execution component of thinking and planning. The alternative proposes two metrics for action: competence and ethics. Robert Kennedy makes the argument that effective and efficient action by military professionals is insufficient to obtain and retain particularly external social contracts with their public clientele, thus compromising their autonomy of action, without assuring these clients that their actions are good in an ethical sense.³¹ Following this line of thought, acting competently is separated from acting ethically in the alternative structure. Acting competently can be scaled by level and by environment from problem solving, in which a problem has been found and identified, and associated information (intelligence) provided for assisting in the solution, through problem finding; this associates with Snowden's complex and chaotic environments, in which organizations and leaders must first understand what it is they are perceiving and experiencing. Russell Ackoff provides guidance on how to distinguish these types of acting (as well as thinking and planning) in *Creating the Corporate Future: Plan or Be Planned For*.³² Jacobs and Jacques rely on Ackoff's thinking in their development of leader education requirements for each leadership level. Finally, acting ethically can be placed on a dual spectrum that addresses the source of action (individual-institution) and source of ethic (legal-moral-ethical). This appears consistent with research on this most difficult but also most abused competency.³³

When brought together, the aforementioned subjects can be combined into a taxonomic structural matrix for PME (shown in the figure, page 43). In this improved PME structure, within each of the fifteen interior cells, subjects or learning areas from the existing *OPMEP* can be mapped directly to a characteristic of the military professional. The benefit of the new arrangement is that it makes sense and simplifies the complex logic of the existing *OPMEP* while retaining the spirit of the original congressional designers of the PME as described in the *Report*. Finally, the structure





(Figure by author)

Figure. Taxonomic Structure of Professional Military Education

allows for a cumulative approach to education beginning with bottom levels (complicated environments, operational [tactical] level) and working upward.

The enhanced structure allows for robust testing and certification at each level of leadership; thus, generation and regeneration of the social contract with external clientele and internal members can become unambiguous, discerning, and objective (within bounds). Testing or certification can be conducted using current assessment techniques and systems (e.g., fitness reports, tests) but can also accommodate more stringent assessments should the need arise.

A second observation of the enhanced structure is that it allows the PME system to follow one more recommendation of the congressional *Report* concerning the quality of instruction: Should it be training, undergraduate, graduate, or something else? The *Report* recommended a graduate curriculum concentrating more on how to think than what to think. The alternative structure easily could slide into a graduate curriculum. However, this article does not recommend that course of action. Rather, it proposes PME follow a professional education curriculum—a hybrid of learning skills and knowledge. If developed to its fullest extent, the alternative structure would allow for a professional degree, like a Juris Doctor or a Doctor of Medicine degree. This degree would be the culmination of the formative, or lowest, level of the profession. It would be followed by advanced certification as a professional’s career moves forward. All degrees and certificates would be dependent on examination and associated relevant rubrics. By implication, failure to achieve a degree or certification also would be possible; in that case, officers could continue to serve but with caps on their advancement in the profession. As Huntington and Snider both have observed, not all officers who serve are—or can be—professionals.

Third and finally, the proposed enhancement frees the progression in PME from its current basis on grade and years of experience to one that uses job positions



and operational environment as the determining factors for education need. We argue this is necessary because of the changes in the nature of military operations in the twenty-first century. One major change or characteristic of what is hybrid or gray zone warfare is a nonlinearity of force organization and application that places individuals in the operational environment dependent on technology, not just hierarchal rank. For example, a junior cyberwarrior may find himself or herself in a dynamically developing situation necessitating use of strategic information in a very short time period that negates the ability to consult with higher command; this person needs the knowledge and (hopefully) wisdom of strategic ramifications of tactical action to make reasoned, timely decisions. An agile professional education system can assist in this regard by affording the person the right education and training at the right time.

Summary and Conclusions

The American military aspires to be professional. That should include a robust PME and training program. The existing program structure is temporally linear: the more time (and grade) one spends, the more advanced the education and training opportunities. It also fits the personnel systems' design, one that represents nineteenth-century management thought.³⁴ The existing structure assumes that with added rank comes added responsibility and ignores the effects of operating environments; that is, it ignores the very real possibility that a junior- or mid-grade officer in any domain can now easily be placed into a situation with the gravest national consequences. Think of the entire cyber domain; think of drone pilots; think of small teams deployed to places like Syria and Niger.

The improved structure of PME proposed in this article is *a* solution to the above problems with the existing structure but not *the* solution. There are many ways than currently exist to create a better education system. All have one thing in common: they will all require more time and more resources devoted to education and training. This must come from a fixed amount of time in any given professional's career; thus, more time in education and training necessarily means less time on deployments. There is no such thing as a free lunch in PME policies. If the American military is serious about retaining its professional status in the increasingly challenging global operating environment of the twenty-first century, then it must decide whether it wants a legacy system and structure that provide a poor fit between its accepted professional characteristics and the environment, or whether it wants an adaptive system of education and training that allows its members to be adequately prepared for the challenges that await them. Both the professionals within the military and its external clientele await its decisions. ❧



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Incorporating Reflection Exercises to Identify Soft Skills in Army Education

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Abstract

Reflection exercises are frequently applied in higher education as part of student development but have been underexplored in Army education. Soldiers participate in extensive training and education to acquire technical skills that contribute to their professional development. The technical skills acquired are complemented by soft skills that are essential for military advancement and postmilitary career transitions; however, identifying and describing the soft skills acquired through Army education courses remains a challenge for soldiers. This article proposes a series of reflection exercises for Army education to help soldiers discuss the soft skills they develop over the duration of their military service. An introduction to reflection methods for developing soft skills is offered, implications for Army facilitators and soldiers are discussed, and barriers to successful implementation are outlined.

The U.S. Army conducts training and education to enable soldiers to successfully contribute to their organization's mission accomplishment and to acquire sets of competencies that are important for their professional development. Army training develops the technical skills required for successful execution of military jobs. At the same time, application of methods for developing soft skills in soldiers are often lacking or misunderstood, even while being a highly valued component of Army training and education. These soft skills, many of which are outlined in the Army's core leader attributes and competencies, contribute toward soldiers' effectiveness, including adaptability, teamwork, initiative, critical thinking, problem solving, and the ability to effectively communicate, among others.¹

Well-designed reflection exercises can be used in Army courses to ensure that soldiers are better able to articulate and continually develop the soft skills acquired throughout their military service. Unfortunately, few scholars and practitioners have examined the best practices available to Army training and education for incorporating reflection in the classroom. This article proposes classroom exercises for integrating reflection with-

in Army training and education that will give soldiers the tools to successfully increase awareness and development of soft skills throughout their military service. Implications for Army facilitators, faculty development courses, and soldier self-development are provided as well as potential barriers to successful implementation.

Background

The Army has a history of executing exceptional training and education programs designed to develop a combination of technical and soft skills that enable soldiers to successfully operate in complex environments. As John Kem, Eugene LeBoeuf, and James Martin noted, early in an Army career, much of a soldier's learning relates to performing the technical aspects of a job.² Over time, the balance transitions so that education dominates courses in the later part of the career, where soldiers seek to increase intellectually and become more "agile, adaptive, and innovative."³

Senior leaders outline the courses and leadership characteristics that are required for career progression. Student assessment in courses, however, usually has a greater emphasis on developing technical competencies required to successfully perform the job.⁴ Despite their wide-ranging technical and subject-matter expertise, a recent study from the Center for Army Leadership revealed Army leaders' effectiveness at developing subordinate's leader competence was in need of attention.⁵ In fact, just over half (59 percent) of Army leaders were perceived as effective at developing others. Moreover, about 25 percent of participants believed that their units placed a "low" or "very low" priority on leader development activities.⁶ The Army's learning environment must be adaptive to learners' needs, engage students at their level, and offer a challenging and relevant curriculum leading to higher levels of learning.⁷ Synthesizing Army training and education with soft-skills development in more effective ways could be a key contributor to changing perceptions about leader development.⁸

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Soldiers' soft skills can be leveraged in military and nonmilitary roles, and many private-sector employers prioritize hiring veterans because of their skill sets.⁹ Veterans, however, have a history of struggling to articulate their soft skills to nonmilitary employers.¹⁰ Additionally, various veteran subgroups purposefully do not identify or promote their military skills when marketing themselves in corporate America. Reflection is a worthy tool to help soldiers identify their acquired soft skills and improve leadership competence.¹¹

After completing a mission, training exercise, or milestone, soldiers often complete a counseling session or after-action review (AAR) about their performance. Rarely, however, are Army personnel challenged to reflect on their field and classroom experiences as part of identifying soft skills. This claim does not suggest the Army undervalues reflection. In fact, AARs are frequently used in training and combat to identify successes and failures as well as to make improvements. Reflection exercises can be applied in ways similar to conducting an AAR in Army courses to increase soldiers' awareness of their acquired soft skills. As Robert Dalessandro outlined regarding Army officers, "self-reflection on schooling, experience, and individual performance becomes critical in identifying strengths and weaknesses within the leadership construct of leader, led, situation, and communications."¹²

While identifying soft skills may be considered the responsibility of the individual, soldiers would arguably benefit from professionally modeled reflection in the classroom. Reflection within Army courses is crucial for raising soldiers' awareness of their individual behaviors and corresponding soft skills.¹³ In addition, teaching soldiers to document the soft skills gained can be an effective way to demonstrate their professional development. Tying together learning experiences with career progression and success enables soldiers to excel in their positions.¹⁴

Reflection Exercises for Army Education

Reflection exercises have been firmly ingrained in adult-learning institutions since the 1980s.¹⁵ Though interpretations of the term vary, reflection often relates to questioning and exploring experiences.¹⁶ Reflection consists of "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusion to which it tends."¹⁷ Simply acquiring knowledge is not enough to assume the critical aspects of reflection will occur; instead, reflection requires intentionally guided examination.¹⁸ Thus, it is necessary to outline strategies for modeling effective reflection within Army courses.

Reflection offers educators guidance for implementation and practice.¹⁹ Benefits of reflection are more productive when contextualized as a bridge connecting learning and work.²⁰ Students are encouraged to examine their experiences to better understand who they are and the corresponding soft skills acquired as lessons learned. Because soldier



experiences and interpretations are unique to each individual, reflection is a dynamic and unpredictable process.²¹ Every student and his or her coinciding learning experience is unique, and consequently, students' development and takeaways vastly differ.²² Regardless of the learning, the product of reflection should lead to equipping soldiers with the tools and confidence to prepare them to address future missions.²³

Facilitators play a vital role in encouraging students to participate in reflection exercises. Classroom learning combines instruction and experiences, with reflection being a key element of soft-skill identification. As John Dewey noted, learning does not occur from the experience itself; rather, learning results from reflecting on past experiences.²⁴ Soldiers are exposed to a great number of experiences, suggesting that reflection may be an effective development tool throughout their career. The following section proposes a list of strategies for introducing reflection exercises in Army education.

Preparation for Application

Army facilitators who incorporate the proposed exercises can benefit from better understanding how reflection will impact course outcomes. Because soft-skills identification is relatively new in Army courses, effective execution of reflection exercises is critical to its success. To be effective, facilitators should allocate time toward learning about the students, understanding their intended career paths, and identifying relationships between Army courses and soft-skill acquisition. Each factor may assist with tailoring appropriate reflection exercises in Army courses. Facilitators interested in developing reflection exercises that help guide the identification of soft skills may consider answering a series of questions drafted ahead of time. Sample questions for executing reflection exercises include but are not limited to the following:

1. Who is the audience?
2. What are the students' likely career paths?
3. What soft skills might students acquire through this course?
4. How can I facilitate soft-skill acquisition in the classroom?
5. How can I assist students in recognizing the soft skills acquired or developed through instruction?

During the Course

Army facilitators may choose to introduce reflection in the classroom by first addressing the purpose and intent. The purpose of the course and learning objectives can include how the curriculum contributes toward developing soft skills. Students may benefit by developing definitions and descriptions about soft skills during intro-



ductory comments. Students should also be informed that reflection exercises will help them identify their strengths and weaknesses, increase awareness of learning, and establish professional goals.²⁵ By including a discussion about reflection prior to moving into the course content, students may be more likely to engage with reflection exercises and accurately identify their soft skills.

Strategies

Video recording of course exercises is one strategy for introducing reflection in the classroom. Role play or demonstration exercises allow soldiers to apply course content and, through video recordings, create opportunities for reflection. Students viewing videos of themselves and interactions with others while performing tasks can provide insight for students on the corresponding soft skills being developed.²⁶ While soldiers view the recordings, they should be encouraged to reflect on their application of materials and consider how they contribute toward soft skills development. For documenting longer-term developmental progress, videos can be included as part of a more extensive student learning portfolio.

Portfolios offer a second strategy for Army facilitators to consider using with reflection. Portfolios have been used to support assessment and reflection since the 1980s and can help students understand their progress and enhance professional development.²⁷ Throughout a course, students may accumulate a variety of artifacts related to learning and assessments that can be added to the portfolio. The electronic or hard-copy files provide students with documentation that can be reviewed to help outline their soft skills in future applications. Darren Cambridge added that artifacts can also outline something about the individual or demonstrate learning against an institutional standard.²⁸ Once the portfolio has accumulated a collection of course products and corresponding assessments, students can review and reflect on the content.

Reflective journals have been used as a strategy in K-12 and higher education courses to support ongoing student development but are utilized to a much lesser extent in Army courses. Journals help students preserve thoughts to reflect about concepts learned, insights gained, and behavioral changes. Students are more likely to reflect on their learning when time is allotted during regular class time as opposed to expecting students to complete journal entries outside of the classroom.²⁹ Reflection techniques can be applied after completion of a particular task, module, or learning unit. Facilitators should introduce the purpose of reflective journals and provide students with guiding questions to help facilitate reflection. Sample questions that may influence effective reflection are provided below; however, depending on the course and students, facilitators may benefit by creating their own questions. Some questions to ask might include the following:



1. What soft skills did you hope to acquire or improve over the course of the program? Why?
2. What soft skills have you acquired or developed over the course of this program?
3. What part(s) of the course contributed toward developing these soft skills? Why?
4. How might the soft skills identified have been beneficial in previous experiences?
5. How might the soft skills identified contribute to success in your current position?
6. How can you apply these soft skills in future positions?
7. What other soft skills would be beneficial for advancement in your military career?

Upon completing the journal entries, students should be encouraged to share important takeaways with a peer or the class, including the soft skills developed through Army training.

Group discussion of acquired soft skills can enhance learning by inviting insight and differing perspectives from classmates. Each student will likely identify their own acquired or refined soft skills, which can contribute to a more robust list. Through the group discussion, new insights on soft skills will likely be revealed. Leveraging group discussion as part of reflection can be integrated during multiple facets of a course in a similar manner to other strategies. Opportunities to discuss acquired soft skills include any time a unit, learning objective, or course is completed.

Course Conclusion

Courses should include a summative discussion about the content covered, as well as the technical and soft skills developed, which may be beneficial for soldiers in both their current and future positions. A complete list of soft skills identified through student reflection should also be collected and redistributed for students to reference when advancing in their careers. Facilitators should seek to develop reflection habits and encourage continuous reflective practice as a key contributor to soldiers' professional development. Through frequent reflection, soldiers will likely continue to improve their understanding of the soft skills that are so critical to leader development.³⁰ Implementing reflection in Army education requires facilitator analysis and time as well as commitment from students to be successful.

Discussion

The proposed reflection exercises provide a baseline for facilitators to help soldiers identify the soft skills acquired through Army courses. Reflection is not new in Army learning, although it could benefit from a more formalized process for implementation. The Army is exceptional at developing knowledge and skills in its members but has not



required soldiers to reflect on their acquired competencies and soft skills.³¹ This gap may be more crucial to bridge than ever before. Today's rapidly changing military environment requires soldiers to be able to assess and reassess the necessary knowledge, skills, and other character attributes required for successful job performance.³² Reflection in the classroom can contribute to soldier readiness in the field across ranks and positions. In addition, reflection promotes soldiers' long-term professional development and can continually be applied across Army training, education, and experience.

Implications

The introduction of reflection exercises in Army courses may have a lasting impact for Army facilitators, soldiers, and course learning outcomes. Army facilitators may benefit from a greater awareness of the impact their methods have on soft skills students acquire, while soldiers learn to reflect on their experiences as a component of professional development. Finally, learning outcomes from Army courses and training exercises may be enhanced or revised through the application of reflection. Each implication is expanded below.

Army facilitators. Army facilitators can benefit from reflection exercises by empowering students to assist in identifying the impact of their training and education. While students complete their own reflection exercises, facilitators can also reflect on the soft skills they are personally developing. An important aspect of a facilitator's personal growth occurs through reflection on one's teaching performance.³³ Neville Hatton and David Smith noted how the terms "reflection" and "critical reflection" have increasingly appeared in teacher education as a vital form of developing impactful teaching practices.³⁴ Reflection includes self-criticism of action with the intent of improving performance.³⁵ Through reflection exercises, facilitators may gain insight into their own soft skills that extend beyond technical instruction. In addition, facilitators are encouraged to continually improve their subject knowledge, teaching methods, and classroom management.³⁶

Soldiers. Soldiers participating in reflection exercises may experience long-term benefits as a result of identifying their soft skills. When preparing for promotion boards, soldiers must be prepared to address questions about both their technical and soft skills as outlined in Army doctrine. Reflection methods benefit soldiers over the duration of their career far beyond the classroom. Through correct application, reflection may be utilized in the institutional, operational, and self-development domains to develop a holistic learning continuum for Army soldiers.³⁷

One final contribution of reflection extends beyond active military service. Military veterans struggle to articulate their soft skills when interviewing for civil-sector jobs.³⁸ For many, the Army represents their first professional job after graduating high school or college. During military service, soldiers develop soft skills that are



also critical for civil-sector employers.³⁹ By identifying and honing the soft skills acquired and developed through military service, veterans can be better prepared to articulate their transferable skills for those civil-sector employers. In doing so, employers may also gain greater clarity about how military training has contributed to the professional development of applicants with a military background.

Training and education. Training, such as field training or warfighter exercises, is distinguishable from education and may also benefit from inclusion of reflection exercises. As David Pierson outlined, training consists of skills and procedure development that is required to demonstrate mastery of a task or competency.⁴⁰ The result is a student who can perform specific tasks to a standard outlined by the profession.⁴¹ The proposed classroom exercises can be applied during Army training to improve soldiers' awareness of the technical and soft skills developed. Army facilitators from all military occupational specialties may consider how these reflection strategies could contribute to the development of their soldiers.

Barriers to Successful Implementation

Introducing reflection exercises in Army education poses challenges for facilitators, including the issue that reflection is generally not considered a key element of work as a facilitator.⁴² As such, faculty development course supplements are necessary to ensure facilitators model effective reflection methods that are customized to the course and rank as appropriate. Any standardized approach to reflection methods used by the Army must be treated with caution.⁴³ Because of the varying amount of time spent in the classroom depending on military occupational specialty and rank, Army facilitators need to incorporate reflection in a manner that best fits the needs of the students and course learning objectives. Additionally, course development can consume several hours for every hour of instruction. Facilitators new to reflection methods may resist an added time requirement. Advocates for reflection can be supported by highlighting the minimal time required to successfully introduce the exercises and outlining how reflection can support soldier development.

Lastly, students need to correctly and objectively reflect on the soft skills identified to appropriately apply them in context. For example, soldiers who identify improved critical-thinking skills should be able to articulate and explain through reflection. If unable to explain, the soft skills may need further development and/or examination. At the same time, soldiers may need substantial assistance in identifying and understanding soft skills as well as their relevance to job performance. Regardless, the soft skills identified should be examined and periodically updated as part of soldiers' professional development over the course of their Army careers.



Conclusion

Soldiers obtain and develop extensive soft skills throughout their Army career that complement their many technical skills. However, soldiers currently are not exposed to frequent, intentional reflection on their learning and developing of soft skills. The benefits of including reflection in Army courses range from supporting soldiers' career advancement to understanding the role courses have in developing soft skills. At the same time, Army facilitators can leverage reflection to improve their own effectiveness in the classroom. This article introduces proven reflection methods that Army facilitators can include in their classroom. These methods support soldiers' development of soft skills across their Army career and beyond. Finally, soldiers who have a deeper understanding of the soft skills they acquire will be better positioned to advance their careers beyond active-duty service. ☞

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U.S. Air Force Military Training Instructor and Instructor Trainer Competencies

Training the Instructors of the Next Generation of Airmen

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Abstract

All U.S. Air Force enlistees, regardless of background or career field assignment, begin their careers in Basic Military Training (BMT), an intense 8.5 week acculturation into the Air Force. During this period each group of forty to sixty new enlistees is led by a military training instructor (MTI) (termed “drill sergeant” or “recruit division commander” by other services) who oversees their activities sixteen hours per day in events covering topics such as Air Force core values, military drill, dorm set-up, weapons, and physical training. Although MTIs are experienced NCOs accomplished in a technical career field specialty, they typically enter BMT without experience as teachers or instructors. As such, the development of the new enlistees they supervise is dependent on how MTIs themselves have been trained in beginning their MTI assignment. The current study provides a job analysis of the competencies identified as important for MTI trainers. Because MTI trainers are competitively selected from among a pool of experienced MTIs to train future MTIs, we also present results comparing those competencies identified as important in the role of MTI trainer (training other NCOs to become MTIs) to those of MTIs (directly instructing new enlistees).

TRAINING THE INSTRUCTORS

The United States Air Force charges just over five hundred military training instructors (MTIs) with the monumental task of training approximately thirty-eight thousand enlisted trainees annually, transforming civilians into productive military members at Lackland Air Force Base, Texas. These trainees come from diverse backgrounds and arrive at Basic Military Training (BMT) with differing types of motivation and levels of understanding of what they have volunteered for. The job of the MTI is to effectively engage, motivate, and train these recruits in 8.5 short weeks for their follow-on technical school training. The MTIs are noncommissioned officers (NCOs) from a variety of occupational specialties across the Air Force (e.g., aircraft maintainers, security forces, personnel administrators, etc.) and require nomination by their commander for the job of MTI. These individuals compete in a rigorous selection process for service members who will be expected to work in a highly fluid and challenging environment.¹ This necessitates a high degree of classroom instruction and on-the-job training with an experienced MTI trainer.

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The current study examines the job roles and requirements of MTI trainers—prior MTI service members now tasked with preparing and training other NCOs to effectively lead and direct newly enlisted BMT trainees. First described is the integral role MTI trainers play in preparing newly assigned MTIs as competent instructors for incoming Air Force trainees and the current processes used for training and developing MTIs and selecting MTI trainers. Next, we present the results of two independent surveys in which experienced MTIs and MTI trainers rated the relative importance of a common set of behavioral competencies for MTIs and MTI trainers. Finally, we present results from focus groups tasked with further developing a unique competency model for MTI trainers with the goal of better distinguishing how to best draw from the pool of experienced MTIs to select MTI trainers. Similarities and differences between the behavioral competencies required for successful MTI versus MTI trainer performance are summarized, and implications for MTI trainer selection are discussed.

Role of MTI Trainers in Developing MTIs and Establishing BMT Culture

Upon selection into the MTI program, the Air Force brings accomplished NCOs to BMT for 7.5 weeks of formal classroom instruction at the Military Training Instructor School (MTIS) followed by twelve weeks of on-the-job training assigned under an MTI trainer. MTIS instructors ensure soon-to-be MTIs have a basic understanding of BMT policies and procedures. Following completion of classroom instruction, MTI trainers pick up where the MTIS instructor left off, providing a shadowing, on-the-job training experience that allows the student to learn training concepts alongside an experienced former MTI. In addition to learning required MTI technical skills, MTI students also take classes on topics including leadership, stress and learning, and risks associated with highly power-imbalanced positions. MTI students also receive in-depth course instruction on stress management, sleep hygiene, and mindfulness to maintain resilience throughout their tour as an MTI.

MTI trainers in the 737th Training Group establish the standard of training for all MTIs in the Air Force. As such, it is critical MTI trainers are capable of and motivated to inculcate the proper training style and philosophy into their students. Because there is a high probability that the training methods an MTI utilizes will closely reflect those of his or her trainer, it is critical that the 737th Training Group selects MTI trainers who possess (or are capable of developing) the competencies required to produce and develop the next generation of MTIs. While MTI trainers are sourced from a candidate pool of experienced MTIs, differences exist in the competencies necessary for successful performance in these two job roles.

Job Analyses of MTIs and Relevance for Identifying Effective MTI Trainers

Although there exist several rigorous job analyses of military instructor duty, to our knowledge no job analysis exists regarding the competencies or characteristics that make NCOs effective in training and mentoring other NCOs to become instructors.² Some may expect that to train other NCOs to be effective MTIs, one would only need to be an effective MTI. However, there are several examples where competent, successful employees are ineffective at training others on the same job.³ While technical knowledge and skills are important components of trainer excellence, without possession of additional skills, there is no guarantee that technical experts will successfully transfer their expertise to others.⁴ Job analyses of civilian training professionals and research on characteristics of exemplary trainers in business and industry make clear this responsibility entails an additional skill set apart from being a subject-matter expert (SME) alone.⁵ Competencies identified as critical to success in training others include showing interest in individual trainees, interacting with others to build confidence and trust, engaging others to maximize their strengths, and having knowledge of effective training strategies.⁶

While both MTIs and MTI trainers instruct and train others, the audience and context differ considerably. That is, the MTI and MTI trainer roles differ on a number of important required competencies, some which may result in effective MTI performance but less effective performance as an MTI trainer. First, MTIs lead a flight (a basic U.S. Air Force unit) of forty to sixty trainees and work with trainees in a group setting, while MTI trainers typically work one-on-one with their students. As such, MTI trainers are often required to tailor training approaches to complement each of their students' individual learning styles and motivations, while MTIs are more likely to utilize training techniques that maximize effectiveness across an entire flight. Second, MTIs instruct new enlistees—likely experiencing the military for the first time—who are typically young, impressionable, and potentially vulnerable. These individuals lack or have only a basic understanding of military culture, which requires MTIs to focus instruction on fundamental knowledge and basic expectations. In contrast, MTI trainers work with experienced peer NCOs already well accomplished in their own military technical specialties who, in some cases, even outrank their MTI trainers. As a result, communicating a certain level of humility and being able to verbalize one's own limitations to a peer are vital for the MTI trainer in a way that it is not when working with subordinates with far less prior experience. Finally, while MTIs are responsible for training others to internalize basic military knowledge and expectations, MTI trainers are responsible for training others *how to teach*, requiring an additional layer of knowledge and skills than might be expected of an MTI.

Current MTI Trainer Selection Process

The existing MTI trainer selection process consists of senior leaders from MTI training squadrons nominating current MTIs they believe would be capable trainers. MTI trainer candidates meet a board of four to five panel members, typically consisting of senior enlisted leaders from the group and the trainer squadron, the training director, and a psychologist from the Military Training Consult Service. While existing selection processes have produced competent trainers (i.e., few issues with trainers struggling with their duties), developing a robust selection process built upon the foundation of a formal job analysis might better serve the organization in further identifying more capable MTI trainers.

Comparison of Common Behavioral Competencies between MTIs and MTI Trainers

Because MTI trainers are sourced from a pool of experienced MTIs, an initial step in identifying MTI trainer competencies is determining the adequacy of existing MTI competency models as applied to MTI trainers.⁷ Although prior job analysis has identified important general attributes (e.g., honesty, dependability, adaptability, etc.) expected of MTIs, in developing specific screening criteria for MTIs, we sought to identify more observable behavioral competencies corresponding to the broader attributes identified previously as important for safe and effective MTI performance.⁸ Having these more observable behavioral competencies also allows for documentation of differences in the required competencies for the MTI trainer and MTI roles.

Overview. The current study compares the relative importance of forty-two behavioral competencies identified as potentially applicable to both MTI and MTI trainers. We first describe the process used to identify behavioral competencies of potential importance for MTIs based on previous job analysis. We then describe two independent surveys in which independent MTI and MTI trainer groups rated the importance of those behavioral competencies for MTIs (Survey 1) or MTI trainers (Survey 2). Finally, we compare the results of the two surveys and describe the results of iterative focus-group sessions to further refine and distinguish the unique competencies required for MTI trainers.

Initial identification of behavioral competencies for MTIs. Potential relevant behavioral competencies for MTIs were identified to correspond to critical domains identified in an earlier job analysis of attributes relevant to safe and effective MTI performance: conscientiousness/work dedication, integrity, judgment/self-control, intelligence/decision-making, leadership, adaptability, interpersonal abilities, and communication.⁹ These proposed behavioral competencies were themselves drawn

from a larger set of behavioral competencies identified as important within the Air Force across many career fields.¹⁰

Survey 1: MTI importance ratings. A total of 434 current and former MTIs assigned to the 737th Training Group as MTI supervisors or MTIS instructors were requested to complete an online survey to identify competencies critical to MTIs. The email survey link directed MTIs to complete one of two randomly assigned survey versions. To minimize survey time completion and increase SME participation, MTI competency item content was divided between the two versions, such that half of MTIs (randomly assigned) were asked to rate the first half of the competency list, and the other half were asked to rate the second half of the competency list. On the survey, MTIs rated the importance of each performance competency on a 4-point scale: 0 = Not Important for MTIs, 1 = Low Importance for MTIs, 2 = Medium Importance for MTIs, 3 = High Importance for MTIs. Of those invited to participate, 124 MTIs completed the survey and an additional thirty-one completed a portion of the survey (overall response rate: 35.25%). With slight differences in the response rate, half of the items were rated by fifty-four to fifty-five MTIs while the other half of items were rated by sixty-eight to sixty-nine MTIs. By rank, survey participants included fifty-nine staff sergeants (40.14%), sixty-four technical sergeants (43.54%), seventeen master sergeants (11.56%), and five senior master sergeants (3.40%). Females represented approximately 11% of respondents.

Survey 2: MTI trainer importance ratings and focus group input. In order to better capture the full range of competencies potentially relevant for MTI trainers, an independent sample of SMEs rated the importance of a common list of forty-two behavioral competencies identified in Survey 1 and twenty-two additional behavioral competencies identified through reviews of O*NET worker characteristics for “11-3131.00 - Training and Development Managers,” U.S. Office of Personnel Management (OPM) multipurpose competencies, and previous Air Force surveys.¹¹

Ratings of behavioral competencies needed for MTI trainers were made by a total of nineteen participants in a series of three focus group sessions in May 2016 (five to seven per focus group session). The nineteen MTI trainer SMEs included fourteen incumbents and five supervisors. The three separate focus groups included (a) current MTI trainers, (b) former MTI trainers (including those currently serving within the 737th Training Group in roles such as MTI/standardization and evaluation, Airmen’s Week facilitators, military drill and ceremonies NCO, MTIS instructor, and protocol NCO), and (c) instructor supervisors and the MTI training superintendent. Participants were asked to rate their familiarity with the MTI trainer job (1 = Not Knowledgeable to 5 = Extremely Knowledgeable). Overall participant knowledge of the MTI trainer position was high ($M = 4.50$, $SD = .837$). By rank, survey participants included one staff sergeant (5.26%), eleven technical sergeants (57.89%), six master sergeants (31.58%), and one senior master sergeant (5.26%). Females represented approximately 47.37% of

Table 1. Effect Size Comparisons for Behaviors Rated in both Military Training Instructor (MTI) Trainer and MTI Job Analyses

Domain	Behavioral competency	MTI-T mean (N = 19)	MTI-T SD	MTI mean (N = 54-69)	MTI SD	Cohen's <i>d</i> value
Adaptability	Modifies leadership or interpersonal style to match audience and setting	2.947	.223	2.73	.59	.421
	Remains focused, decisive, and on-task during stressful situations	3.000	.000	2.87	.51	.289
	Effectively manages multiple tasks and priorities to complete work objectives	2.947	.223	2.87	.38	.221
	Adapts to new and changing missions, tasks, and situations	2.842	.365	2.80	.59	.084
Communication	Understands the appropriate time and place to communicate message	2.789	.408	2.62	.73	.258
	Appropriately expresses thoughts and opinions	2.737	.440	2.59	.67	.227
	Listens attentively and clarifies information when necessary	2.789	.408	2.71	.49	.176
	Speaks clearly and persuasively to individuals or small groups	2.684	.567	2.72	.68	-.058

(Table by Laura Barron)

Table 1. Effect Size Comparisons for Behaviors Rated in both Military Training Instructor (MTI) Trainer and MTI Job Analyses (continued)

Domain	Behavioral competency	MTI-T mean (N = 19)	MTI-T SD	MTI mean (N = 54-69)	MTI SD	Cohen's <i>d</i> value
Conscientiousness/ work dedication	Maintains physical standards and professional military appearance	3.000	.000	2.87	.42	.353
	Enforces Air Force instructions, policies, and procedures	3.000	.000	2.87	.45	.330
	Prioritizes work so that critical tasks and projects are completed in a timely manner	2.842	.365	2.84	.54	.012
	Follows through on tasks and projects to ensure responsibilities are met	2.789	.521	2.81	.55	-.047

(Table by Laura Barron)

participants (nine of nineteen). All participants had a minimum of eighteen months of experience as an MTI; fifteen of nineteen participants (78.95%) had served as an MTI for thirty months of more. Overall 63.16% of the sample (twelve of nineteen) had at least twelve months of experience as an MTI trainer, and an additional 10.53% of the sample (two of nineteen) had six to eleven months of experience as an MTI trainer.

Competency importance (i.e., the level of importance that one would place on the attribute for performing MTI trainer responsibilities) was rated on the following scale: 1 = Not Important, 2 = Slightly Important, 3 = Important, 4 = Very Important, or 5 = Extremely Important. A “Do Not Know” option was also available for participants uncertain about the importance of a specific behavior. Interrater reliability (IRR) of behavioral competency importance ratings was first assessed within group, with focus group one (ICC = .825), two (ICC = .725), and three (ICC = .712) demonstrating adequate levels of within-group agreement. Additionally, pooled IRR between focus groups was also high (ICC = .895), indicating groups could be combined into a single pool of nineteen

Table 1. Effect Size Comparisons for Behaviors Rated in both Military Training Instructor (MTI) Trainer and MTI Job Analyses (continued)

Domain	Behavioral competency	MTI-T mean (N = 19)	MTI-T SD	MTI mean (N = 54-69)	MTI SD	Cohen's <i>d</i> value
Integrity	Does not take advantage of rank or position for personal benefit	2.941	.235	2.77	.62	.305
	Does not hide or distort negative information to avoid consequences or inconvenience	2.833	.373	2.65	.70	.282
	Assumes responsibility for actions of team	2.842	.365	2.70	.66	.231
	Does not allow biases or personal relationships to interfere with professional actions	2.895	.307	2.80	.59	.178
	Supports Air Force mission and goals, regardless of personal feelings	2.842	.365	2.81	.43	.080
	Displays commitment to the Air Force core values	2.842	.365	2.91	.37	-.191
	Accepts responsibility for own actions, regardless of potential consequences	2.842	.365	2.94	.29	-.319

(Table by Laura Barron)

raters. Final IRR values across all nineteen raters indicated subject-matter experts had high levels agreement (ICC = .884), and that importance ratings could be averaged into a single mean score for each behavioral competency.

Comparison of MTI and MTI trainer competencies. The common forty-two behavioral competencies rated on importance for MTI trainers (Survey 2) and, separately, on importance for MTIs (Survey 1), were compared to one another to determine relative importance for MTI trainers as opposed to MTIs. MTI trainer

Table 1. Effect Size Comparisons for Behaviors Rated in both Military Training Instructor (MTI) Trainer and MTI Job Analyses (continued)

Domain	Behavioral competency	MTI-T mean (N = 19)	MTI-T SD	MTI mean (N = 54-69)	MTI SD	Cohen's <i>d</i> value
Intelligence/ decision-making	Considers multiple sides of an issue and input from appropriate individuals when making decisions	2.842	.365	2.62	.60	.395
	Identifies and understands constraints and mitigates potential problems	2.842	.365	2.69	.60	.273
	Identifies and assesses risk and takes appropriate action to ensure safety and mission accomplishment	2.842	.365	2.71	.63	.232
	Makes sound decisions based upon facts and available information	2.842	.365	2.70	.74	.208

(Table by Laura Barron)

ratings from Survey 2 were converted from a 1-5 scale (1 = Not Important to 5 = Extremely Important) to the 0-3 (0 = Not Important to 3 = High Importance) ratings scale used during the MTI job analysis. MTI trainer ratings of “5” and “4” (Extremely Important or Very Important) were rescaled as “3” (High Importance), while ratings of “3” (Important), “2” (Slightly Important), and “1” (Not Important) were rescaled as “2” (Medium Importance), “1” (Low Importance), and “0” (Not Important), respectively. Cohen’s *d* values were computed to determine the magnitude of differences in rater behavioral importance scores between the two occupations, with effect size values of .2, .5, and .8 corresponding to small, medium, and large mean differences, respectively.¹²

Results

In total, importance ratings for twenty-seven out of forty-two behaviors (64.3%) had Cohen’s *d* values of .20 or greater, indicating higher importance ratings for

Table 1. Effect Size Comparisons for Behaviors Rated in both Military Training Instructor (MTI) Trainer and MTI Job Analyses (continued)

Domain	Behavioral competency	MTI-T mean (N = 19)	MTI-T SD	MTI mean (N = 54-69)	MTI SD	Cohen's <i>d</i> value
Interpersonal	Works effectively and appropriately with people of the opposite sex, and from different cultural and religious backgrounds	2.947	.223	2.84	.41	.285
	Works effectively and appropriately with people of the opposite sex, and from different cultural and religious backgrounds	2.947	.223	2.84	.41	.285
	Acts courteously and respectfully to others at all times	2.737	.547	2.63	.78	.147
	Identifies and diffuses tensions among team members, as needed	2.632	.581	2.65	.54	-.028
	Takes a personal interest in the welfare of each team member	2.632	.741	2.70	.55	-.107

(Table by Laura Barron)

MTI trainers than for MTIs (see table 1, pages 64–70). The five behavioral competencies showing the greatest difference in terms of higher importance for MTI trainers relative to MTIs were:

- ◆ *Modifies leadership or interpersonal style to match audience and setting* ($d = .421$)
- ◆ *Holds others to expectations and standards to help them meet goals* ($d = .401$)
- ◆ *Leads others in a fair and consistent manner* ($d = .388$)
- ◆ *Remains patient with subordinates when they make a mistake* ($d = .437$)
- ◆ *Considers multiple sides of an issue and input from appropriate individuals when making decisions* ($d = .395$)

Table 1. Effect Size Comparisons for Behaviors Rated in both Military Training Instructor (MTI) Trainer and MTI Job Analyses (continued)

Domain	Behavioral competency	MTI-T mean (N = 19)	MTI-T SD	MTI mean (N = 54-69)	MTI SD	Cohen's <i>d</i> value
Leadership	Holds others to expectations and standards to help them meet goals	2.947	.223	2.78	.45	.401
	Leads others in a fair and consistent manner	3.000	.000	2.87	.38	.388
	Provides subordinates or others with timely, honest, and constructive feedback	2.833	.373	2.62	.68	.348
	Leads by example (i.e., talks the talk and walks the walk)	3.000	.000	2.90	.35	.328
	Provides training to subordinates or others when they need it	2.947	.223	2.84	.41	.285
	Reprimands fairly, consistently, and to the appropriate amount	2.895	.307	2.78	.48	.256
	Motivates and empowers others to complete tasks and assignments	2.895	.447	2.80	.44	.221

(Table by Laura Barron)

Generally, the additional importance of these competencies for those who train other NCOs to become instructors as compared to those who instruct new recruits (basic military trainees) directly may be explained in terms of

- a. a focus on individualized attention and tailored instructional methods that is possible to a greater extent when working with MTIs one-on-one than when

Table 1. Effect Size Comparisons for Behaviors Rated in both Military Training Instructor (MTI) Trainer and MTI Job Analyses (continued)

Domain	Behavioral competency	MTI-T mean (N = 19)	MTI-T SD	MTI mean (N = 54-69)	MTI SD	Cohen's <i>d</i> value
Self control/ judgment	Remains patient with subordinates when they make a mistake	2.895	.307	2.63	.68	.437
	Refrains from negative or degrading comments about members of the opposite sex, other cultural or ethnic groups, or different personal backgrounds	2.947	.223	2.83	.54	.238
	Manages setbacks with maturity	2.947	.223	2.87	.42	.203
	Displays control under pressure	2.947	.223	2.87	.42	.203
	Acts as a role model to others regarding good judgment, alcohol use, and the Wingman concept	2.833	.373	2.72	.63	.194
	Avoids inappropriate personal relationships (e.g., flirting, fraternization)	2.947	.223	2.94	.29	.019
	Does not engage in maltreatment or maltraining of others	2.842	.488	2.89	.50	-.094

(Table by Laura Barron)

- working with flights of over forty trainees (“Modifies leadership or interpersonal style to match audience ...”);
- b. taking more of a helping role in working with more advanced learners who are more likely to be self-motivated and bring their own goals for learning (“Holds others to expectations ... to help them meet goals”), rather than having to focus more efforts on drilling the goals of training into new recruits;

- c. approaching training of instructors with greater open-mindedness and recognition of multiple ways that different instructors can respond to a given situation to effectively teach students (“Considers multiple sides of an issue ...”), as opposed to the need for generally projecting a more definitive, directive approach for drilling in new recruits black-and-white Air Force standards for training tasks that are more concrete (e.g., how to march in formation, how to accomplish a push-up, etc.); and
- d. exercising more patience (“Remains patient with subordinates when they make a mistake”) and according more respect and showing even greater attention to fair treatment (“Leads others in a fair and consistent manner”), consistent with the fact that MTI students, unlike new recruits who undergo BMT for the purpose of being indoctrinated or “blued” in Air Force ways, have already demonstrated themselves as high-performing members (having achieved the rank of E-6 or higher) over the course of their Air Force careers.

In contrast, one behavioral item (“Accepts responsibility for own actions, regardless of potential consequences”) was identified as being more important for MTIs than for MTI trainers, $d = -.32$. This is consistent with the fact that the impact of MTI trainers’ actions is more indirect than that of MTIs, such that MTI trainer actions do not affect BMT trainees directly, but have second-order effects in terms of how their actions affect MTIs who then in turn affect BMT trainees.

All behavioral competencies rated as highly important for MTIs were similarly rated as highly important for MTI trainers (average importance rating greater than or equal to 4.50). Two additional behavioral competencies not included in the MTI survey that were identified as highly important for MTI trainers ($M \geq 4.50$) were “Works independently and accomplishes tasks without constant supervision” and “Takes personal responsibility for completing work tasks.” Although these behavioral competencies are also likely important for MTIs, MTIs are monitored and supervised more closely than MTI trainers, necessitating a higher level of self-sufficiency and initiative for MTI trainers. Although consensus was that most of the additional OPM, O*NET, and other competencies were important for MTI trainers, competencies related to creative or divergent thinking (e.g., “Develops creative ways to solve a problem”) were generally not rated as important ($M \leq 3.0$), nor were competencies associated with (formal) oral presentations or writing ($M \leq 3.4$). Table 2 (on pages 72–77) displays the average importance ratings for MTI trainers for the full list of rated behavioral competencies (incorporating OPM, O*NET, and other competency additions).

Additional Focus Group Insights

The use of an iterative focus-group process allowed for additional insights on MTI trainer competencies and discussion of how the competencies required for

Table 2. Mean Ratings of Work-Related Competencies for Military Training Instructor (MTI) Trainers

Domain	Source	Rater mean	Rater SD	Behavioral competency
Self-control/judgment	MTI	4.842	.501	Avoids inappropriate personal relationships or flirting.
Self-control/judgment	MTI	4.842	.501	Avoids negative or degrading comments about the opposite sex or other cultural groups.
Interpersonal	MTI	4.789	.535	Works effectively and appropriately with people from different cultural or religious backgrounds.
Interpersonal	MTI	4.737	.562	Works effectively and appropriately with people of the opposite sex.
Self-control/judgment	MTI	4.737	.806	Avoids maltreatment or maltraining of others.
Leadership	MTI	4.684	.478	Leads by example (i.e., talks the talk and walks the walk).
Leadership	MTI	4.684	.478	Leads others in a fair and consistent manner.
Adaptability	MTI	4.684	.478	Remains focused, decisive, and on-task during stressful situations.
Conscientiousness/work dedication	MTI	4.684	.478	Enforces AF instructions, policies, and procedures.
Integrity	MTI	4.647	.606	Avoids taking advantage of rank or position for personal benefit.
Leadership	MTI	4.632	.597	Provides training to subordinates or others when they need it.
Self-control/judgment	MTI	4.632	.684	Remains patient with subordinates when they make a mistake.

(Table by Laura Barron)

Table 2. Mean Ratings of Work-Related Competencies for Military Training Instructor (MTI) Trainers (continued)

Domain	Source	Rater mean	Rater SD	Behavioral competency
Leadership	MTI	4.579	.769	Motivates and empowers others to complete tasks and assignments.
Adaptability	MTI	4.579	.607	Manages multiple tasks and priorities to complete work objectives.
Self-control/ judgment	MTI	4.579	.607	Displays control under pressure.
Self-control/ judgment	MTI	4.579	.607	Manages setbacks with maturity.
Conscientiousness/ work dedication	MTI	4.526	.513	Maintains physical standards and professional military appearance.
Integrity	MTI	4.526	.772	Accepts responsibility for own actions and for actions of team.
Initiative	O*NET	4.500	.618	Works independently and accomplish tasks without constant supervision.
Initiative	O*NET	4.500	.707	Takes personal responsibility for completing work tasks.
Leadership	MTI	4.474	.612	Holds others to expectations and standards to help them meet goals.
Analysis/ decision-making	MTI	4.474	.772	Assesses risk and takes action to ensure safety and mission accomplishment.
Integrity	MTI	4.474	.697	Avoids allowing biases or personal relationships to interfere with professional actions.
Leadership	MTI	4.421	.692	Reprimands fairly, consistently, and in the appropriate amount.

(Table by Laura Barron)

Table 2. Mean Ratings of Work-Related Competencies for Military Training Instructor (MTI) Trainers (continued)

Domain	Source	Rater mean	Rater SD	Behavioral competency
Integrity	MTI	4.421	.769	Displays commitment to the Air Force core values, and supports Air Force mission and goals, regardless of personal feelings.
Self-control/ judgment	MTI	4.389	.778	Acts as a role model regarding good judgment, alcohol use, and the Wingman concept.
Teaching others	MTI	4.389	.778	Provides constructive feedback.
Adaptability	MTI	4.368	.761	Adapts to new and changing tasks and situations.
Adaptability	MTI	4.368	.597	Modifies leadership or interpersonal style to match audience and setting.
Conscientiousness/ work dedication	MTI	4.368	.761	Prioritizes work so that critical tasks are completed in a timely manner.
Integrity	MTI	4.333	.767	Avoids hiding or distorting negative information.
Teaching others	OPM	4.333	.840	Helps others learn through formal or informal methods.
Teaching others	OPM	4.333	1.138	Acts as a mentor.
Teaching others	OPM	4.278	.895	Coaches others on how to perform tasks.
Interpersonal	MTI	4.263	.933	Acts courteously and respectfully to others.
Conscientiousness/ work dedication	AF	4.263	.933	Manages own time and the time of others to accomplish work goals.

(Table by Laura Barron)

Table 2. Mean Ratings of Work-Related Competencies for Military Training Instructor (MTI) Trainers (continued)

Domain	Source	Rater mean	Rater SD	Behavioral competency
Communication	MTI	4.211	.787	Understands the appropriate time and place to communicate message.
Analysis/ decision-making	MTI	4.211	.713	Considers multiple sides of an issue and input from appropriate individuals.
Conscientiousness/ work dedication	MTI	4.211	.855	Follows through on tasks to ensure responsibilities are met.
Teaching others	OPM	4.111	.832	Identifies training needs.
Analysis/ decision-making	MTI	4.105	.658	Identifies constraints and mitigates potential problems.
Conscientiousness/ work dedication	AF	4.056	.873	Pays close attention to the details of own work, to ensure work is accurate and complete; carefully reviews and scrutinizes own work.
Communication	MTI	4.053	.705	Listens attentively and clarifies information when necessary.
Analysis/ decision-making	MTI	4.053	.621	Makes sound decisions based upon facts and available information.
Communication	OPM	4.000	.471	Expresses information (for example, ideas or facts) to individuals or groups effectively, taking into account the audience and nature of the information (for example, technical, sensitive, controversial).
Interpersonal	MTI	3.947	1.026	Takes a personal interest in the welfare of each team member.
Analysis/ decision-making	O*NET	3.947	.848	Analyzes the strengths and weaknesses of specific actions or decisions.

(Table by Laura Barron)

Table 2. Mean Ratings of Work-Related Competencies for Military Training Instructor (MTI) Trainers (continued)

Domain	Source	Rater mean	Rater SD	Behavioral competency
Analysis/ decision-making	O*NET	3.947	.705	Combines separate pieces of information to form general rules or conclusions; recognizes patterns or trends and anticipates outcomes.
Communication	MTI	3.895	.809	Speaks clearly and persuasively to individuals or groups.
Analysis/ decision-making	O*NET	3.895	.937	Applies general rules to specific problems to produce answers that make sense.
Interpersonal	MTI	3.842	.834	Identifies and diffuses tension among team members, as needed.
Communication	MTI	3.789	.535	Appropriately expresses thoughts and opinions.
Conscientiousness/ work dedication	O*NET	3.737	1.046	Shows willingness to work long hours when appropriate.
Learning ability	OPM	3.722	.752	Acquires new skills, and understands new concepts, ideas, or facts quickly and easily.
Conscientiousness/ work dedication	AF	3.684	.946	Carefully plans out the sequence of actions needed to meet short- and long-term goals.
Communication	O*NET	3.579	.838	Reads and understands written English words and sentences.
Initiative	O*NET	3.529	1.068	Initiates difficult tasks without excessive procrastination.
Communication	OPM	3.368	.684	Makes clear and convincing oral presentations.

(Table by Laura Barron)

Table 2. Mean Ratings of Work-Related Competencies for Military Training Instructor (MTI) Trainers (continued)

Domain	Source	Rater mean	Rater SD	Behavioral competency
Communication	OPM	3.316	.820	Writes clearly and uses language appropriate for the audience; writes English words or sentences so others will understand; spells correctly.
Creative thinking	OPM	3.111	.758	Designs new methods where established methods and procedures are not suitable or are unavailable.
Conscientiousness/ work dedication	AF	3.053	1.268	Keeps own work space neat, tidy, and organized.
Creative thinking	O*NET	3.000	.877	Comes up with unusual or clever ideas about a topic.
Creative thinking	O*NET	2.938	.680	Develops creative ways to solve a problem.
Creative thinking	OPM	2.833	.786	Uses imagination to develop new insights into situations and applies new solutions to problems.

(Table by Laura Barron)

successful performance as an MTI trainer differed from those important for MTIs. Qualitative input from two initial focus groups on behavioral competencies important for MTI trainers that were not captured on the initial lists were recorded and summarized. The additional behavioral competencies identified in the initial MTI trainer focus groups were then reviewed and validated in a second round of focus groups in which seventeen participants were asked if there were any competencies identified in the earlier focus group that should be removed (i.e., were not relevant to MTI trainer performance) or added. Eight vetted behavioral competencies were ultimately identified to include competencies focused on the domains of “communication,” “initiative,” “self-control/judgment,” and multiple competency behaviors focused on the domains “teaching others” and “adaptability”:

- ◆ **Adaptability:** *Demonstrates resilience in response to adversity*
- ◆ **Adaptability:** *Displays awareness of one’s own limitations or weaknesses*
- ◆ **Communication:** *Communicates clear, measurable performance standards for meeting training objectives*

- ◆ **Initiative:** *Demonstrates an active commitment to self-improvement*
- ◆ **Self-Control/Judgment:** *Projects a sense of humility*
- ◆ **Teaching Others:** *Gives trainees the opportunity and latitude to succeed through their own trial and error where appropriate*
- ◆ **Teaching Others:** *Adapts training styles and methods to the needs and style of the student*
- ◆ **Teaching Others:** *Manages trainees' unrealistic expectations when needed*

Discussion

Overall, results validated that most competencies important for MTI performance are also important for MTI trainer performance. However, results also suggest certain competencies may be particularly important for MTI trainers relative to MTIs. These findings highlight that tailoring or modifying one's leadership or interpersonal style may be more impactful for MTI trainers given that they train their MTI students one-on-one rather than training a flight of forty to sixty trainees simultaneously. Additionally, a more open-minded, tolerant point of view (considering multiple sides of an issue, remaining patient with subordinates when they make a mistake) may be particularly critical as an MTI trainer given that they work with experienced student NCOs who have already proven themselves within the military rather than with new, inexperienced trainees who must be indoctrinated on basic military culture. Recognition of these differences creates an opportunity for the organization to modify its trainer selection process to find these capabilities among the pool of MTI trainer candidates. Additionally, these findings can enhance training efforts to reinforce or develop the competencies identified as most critical for MTI trainer performance.

Discussion in the focus group sessions also highlighted the importance of humility, awareness of one's own limitations, and active commitment to self-improvement as important to a greater extent for MTI trainers than for MTIs. While these competencies may be important to MTIs to some extent, working with students closer in experience level may make recognition of one's own weaknesses particularly important. While noting personal weaknesses with inexperienced trainees as an MTI may undermine necessary credibility in some instances, one-on-one mentoring of other NCOs to become MTIs may necessitate recognition of one's own shortcomings, and encourage admission when one does not have "all the answers."

While the present study focused on MTI and MTI trainers in the context of Air Force BMT, one would expect findings to provide good generalizability to initial military training across the other services. As such, those who make good drill sergeants or drill instructors in sister services may similarly require a distinct set of behavioral competencies as opposed to those who effectively teach the next generation of NCOs to become effective drill sergeants or drill instructors. ☞

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The Intersection of Leadership and Emotions

Lessons and Actions Leading to Change

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Abstract

Emotions affect us, and they affect our work. Yet there is a tendency to view the role of emotion in leadership as something that must be under control and out of sight. This presents a gap in leadership practice. Emotional intelligence is one tool for capitalizing on the powerful role of emotions in human interactions for more effective leadership. In this article, we describe the relationship between emotions and leadership. We present findings based on data collected from participants in a recently implemented emotional intelligence leader development workshop aimed to increase participants' understanding of emotional intelligence and improve their emotional intelligence skills toward the generation of positive organizational change.

Foreword

It is my command's responsibility to find, recruit, educate, and develop officers for the U.S. Army. With that responsibility, Cadet Command is left to determine "who" to select and "how" to develop them to lead our nation's young men and women in a complex and dangerous world.

In my role as commanding general of the U.S. Army Cadet Command and Fort Knox, I have spent many hours reflecting on what makes a good leader. I have asked myself, "What are the greatest leadership attributes, and how can they be taught or nurtured to develop the best leaders possible?"

LEADERSHIP AND EMOTIONS

In that effort, I have come to one indisputable conclusion after thirty-five years of military service: the very foundation of good leadership is *an individual's intimate understanding of self and those they lead*.

An appreciation for, and understanding of, emotional and social intelligence is essential to any good leader. I define “good” as an emotionally savvy leader who can positively motivate others to persevere beyond all known or perceived personal limitations.

The U.S. Army is a leader-centric organization that does not and cannot hire outside help. It must develop and grow its own leaders from the bottom up. In this article, members of Cadet Command and the University of Louisville explore the criticality of integrating emotional intelligence into the leader development curriculum within Cadet Command and the United States Army.

I believe their efforts are the start of a revolution in the way the Army will look at developing leaders in the coming years. This article and associated debate will further the Army's efforts to develop agile, adaptive, and innovative leaders for the twenty-first century.

Maj. Gen. Christopher P. Hughes

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Introduction

Emotions affect us, and they affect our work. In fact, several large companies, including PepsiCo, Southwest Airlines, and Zappos, have incorporated dialogue regarding emotions into their management principles.¹ Some companies have even started to track employee emotions in order to display the relationship between emotions and productivity. Research is clear—it is impossible to remove emotion from leadership. Leadership involves motivating humans, and humans react to and express messages through emotions. A failure to address the role of emotions in interactions may result in physical stress such as pain, headaches, or sleeplessness. It also may result in psychological stress such as memory loss, lack of clarity, and diminished cognitive ability.

Military Inclination to Downplay Emotion

There is a tendency in the military to view the role of emotion in leadership as something that must be under control and out of sight. This presents an area of need in leadership practice. Emotional intelligence is one tool for capitalizing on the powerful role of emotions in human interactions for more effective leadership. Emotional intelligence can better equip leaders to motivate others to achieve their desired goals and outcomes. There are many definitions and models of emotional intelligence. For the purposes of this study, we adopt the empirically tested approach of John Mayer, Peter Salovey, and David Caruso, who defined emotional intelligence as the capacity to reason about emotions, and of emotions to enhance thinking. It includes the abilities to accurately perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth.² According to this definition, one's emotional intelligence is not fixed but, importantly, can be strengthened.

To address the need for effective leader development around emotional intelligence, the U.S. Army Cadet Command recently implemented a professional development workshop for professors of military science, the Emotions and Leadership Workshop. For this study, we analyzed participant feedback data from the workshop to determine its effectiveness in increasing participants' understanding of emotional intelligence and emotional intelligence skills.

In the pages that follow, we provide a brief overview of emotional intelligence and leadership. We then describe the workshop and workshop design. We present findings from our analysis to identify lessons learned and conclude with a brief overview of their implications.

Emotional Intelligence

In 1993, Howard Gardner introduced the idea there are multiple forms of intelligence. Gardner's research supported intelligence in eight areas; however, he never identified emotions as a measure of intelligence.³ Subsequent to Gardner's groundbreaking study, other scholars have suggested emotions represent a measurable intelligence and affect leadership and learning.⁴

Several models have emerged in the literature to depict the constructs that formulate into emotional intelligence. Daniel Goleman presents an accessible model drawing on four domains of emotional intelligence: self-awareness, self-management, social awareness, and relationship management (presented in the table).⁵ He structured the domains across self and social or group settings, cross-linked with levels of awareness and management of the setting or context. Goleman suggested the domains in which one falls may be adjusted through learned competencies. For example, social awareness is associated with the competencies of empathy and organizational awareness, while self-management is associated with emotional self-control, adaptability, achievement, and positive outlook.

Table. Overview of Daniel Goleman's 2011 Mixed Approach to Emotional Intelligence

	Self	Social
Awareness	Self-awareness · Emotional self-awareness	Social awareness · Empathy · Organizational awareness
Management	Self-management · Emotional self-control · Adaptability · Achievement · Positive outlook	Relationship management · Inspiring leadership · Influence · Conflict management · Teamwork and collaboration

(Table by Jeffrey C. Sun, PhD)

Leadership and Emotional Intelligence

Researchers have demonstrated a relationship between leadership behaviors and emotional intelligence. For instance, Zhidong Li et al. examined how emotional intelli-

gence related to addressing work performance issues.⁶ Li et al. found participants who preferred to use support immediately before pressure tended to have higher levels of emotional intelligence than participants who opted for any other style. This study and others suggest the value of emotional intelligence in positively influencing behavior. However, conceptualizations of leadership have yet to fully realize the connections between emotional intelligence and leadership.

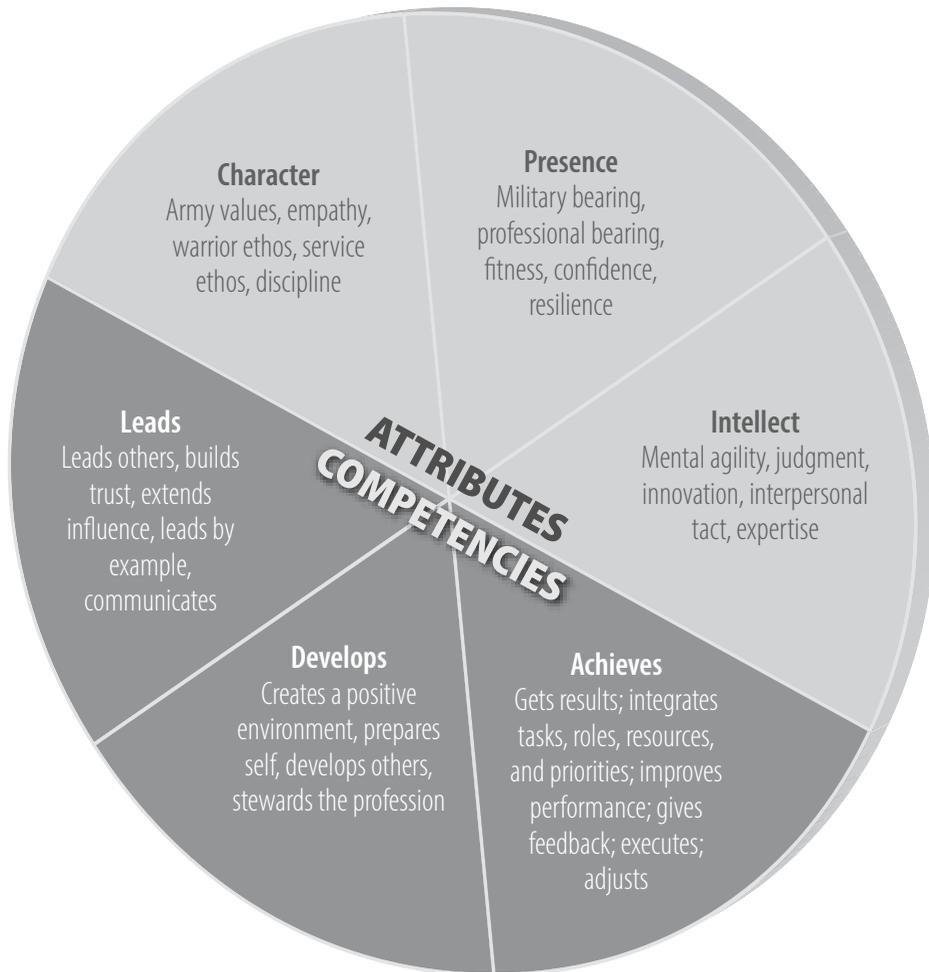
One can become easily overwhelmed when trying to identify a single leadership theory, model, or style that covers all organizations and situations. In *The Bass Handbook of Leadership: Theory, Research, and Managerial Applications*, Bernard Bass and Ruth Bass cited over three thousand leadership studies.⁷ Many of these theories and models have been used by industry, academia, the military, and the government in the United States for over eighty years. Leadership theories and models continue to shape modern leadership understanding and practice; yet there remains a gap between leadership theories and emotional intelligence. Consequently, we turn next to consider leadership as conceptualized in Army doctrine. The Army leadership doctrine and strategy discussed will show linkage to the four classical leadership theories, and a need to codify emotional intelligence as another component of leadership in today's Army.

Army Leadership Requirements Model

The Army grows its own leaders from within the ranks of commissioned officers and noncommissioned officers. Leadership and leader development are at the heart of the Army. Current Army Doctrine Publication (ADP) 6-22 and Army Doctrine Reference Publication 6-22, both titled *Army Leadership*, and supporting Field Manual 6-22, *Leader Development*, have been in force since 2012, 2012, and 2015, respectively.⁸

Since publishing its first leadership doctrine in 1948, the Army has made many refinements. Although it does not directly teach or mandate use of a preferred leadership theory, model, or style, it provides a common framework of required leadership attributes and competencies to enable all Army leaders to accomplish a full range of missions. The Army uses FM 6-22, the Army Leadership Requirements Model (ALRM) (see figure 1, page 85), and the Army Leader Development Strategy as foundations for leader development.⁹ ADP 6-22 defines an Army leader as “anyone who, by virtue of assumed role or assigned responsibility, inspires and influences people to accomplish organizational goals.”¹⁰ The Army requires its leaders to “motivate people both inside and outside the chain of command to pursue actions, focus thinking, and shape decisions for the greater good of the organization.”¹¹ ADP 6-22 further defines Army leadership as “the process of influencing people by providing purpose, direction, and motivation to accomplish the mission and improve the organization.”¹²

Even a cursory view of the ALRM provides evidence of opportunities to integrate emotional intelligence into the model. The attributes of empathy, confidence, resilience,



(Figure from FM 6-22, *Leader Development*, June 2015)

Figure 1. Army Leadership Requirements Model

mental agility, and interpersonal tact have clear connections to understanding and managing one’s own and others’ emotions; as do the competencies of building trust and creating a positive environment. Emotional intelligence is important, not only for leading and developing others but also for achieving results.

Despite these clear connections, there remains a need to develop, implement, evaluate, and refine leader development strategies around emotional intelligence within the Army. Others have also identified this need and have begun to offer insights to address it. For example, Tanekkia Taylor-Clark considered the connections between the ALRM

and emotional intelligence; but that prior analysis did not account for an application to leaders within Army Reserve Officers' Training Corps programs.¹³

Emotions and Leadership Sessions Overview

In an effort to advance the integration of emotional intelligence and leadership development, the Emotions and Leadership Workshop was developed as part of the Mission Command Workshop for the United States Army Cadet Command's professors of military science. Cadet Command is a geographically dispersed command with eight brigades and 274 Senior Reserve Officers' Training Corps (SROTC) host programs (each led by a professor of military science) with additional extension and cross-town satellite programs. In total, Cadet Command has a presence on over 950 college and university campuses across the United States and its territories. Cadet Command employs over 3,500 cadre, faculty, and staff members across the brigades and college-level programs with responsibility for training and educating over 30,000 SROTC Cadets. This group of 3,500 includes approximately 1,800 active duty SROTC instructors (cadre/faculty members) and 180 contracted civilian instructors. The remainder are support staff who provide administrative, logistical, and recruiting support.

In September 2017, the Cadet Command's commanding general hosted an annual three-day Mission Command Workshop attended by over three hundred senior leaders. This forum provided the commanding general an opportunity to share his intent and guidance with all professors of military science and brigade leadership teams. The theme of the Mission Command Workshop was "Emotions and Leadership." This article examines the Emotions and Leadership leader development sessions within the three-day workshop.

Emotions and Leadership Sessions

The Mission Command Workshop comprised a series of six sessions held over seven hours on emotions and leadership. The impetus for the design, development, and implementation of the sessions was the need for innovative ways to begin to develop senior leaders at Cadet Command. The sessions were designed to address the gap in the Army's understanding of how emotions impact team performance, critical thinking, and communication. The commanding general recognized this omission and challenged his team to look differently at themselves and those with whom they work.

The design team members posited the Army lacks a formal, institutionalized curriculum that addresses emotional management and the role of emotions in leadership. This gap had the potential to negatively affect morale, unit cohesiveness, leadership, and decision-making. The overarching outcome was to educate

participants on the importance of emotions in leadership. The desired learning outcomes for the workshop sessions were that participants would (a) understand a common definition of emotional intelligence, (b) develop an understanding of the role of emotional intelligence in personal and social behaviors, (c) develop an understanding of six specific leadership styles as they relate to getting results and influencing workplace climate, (d) understand the strategies to develop emotional intelligence in self and others, and (e) develop and implement a personal development plan for improving personal and social competencies.¹⁴

Sessions design. The design team was comprised of two educational design experts, one research psychologist specializing in emotional management, and two professional facilitators with experience designing and teaching emotional intelligence to senior Army leaders. Emotional intelligence is based on a set of abilities that can be improved through education and experience. Emotions have been connected to leader behaviors, influence, and transformational leadership.¹⁵ The design team worked within a paradigm that assumed that adult learners could become more emotionally intelligent and make adjustments in their behaviors based on the learning offered through the sessions.

The team leaned on the adult learning theory developed by Malcolm Knowles.¹⁶ Knowles's model includes an adult learner's need to know why something is important, desire to be responsible for their own learning, need to be respected for the knowledge they bring to the learning environment, and need for learning to be problem-centered and relevant.

Learning experts have found learning occurs best when learners grapple with ideas, challenge their assumptions, and reexamine their paradigm of reality.¹⁷ Based on adult learning principles and the concept that learning occurs best when learners are engaged with the content, the design team used a learner-centered (learning is challenging, reflective, within the control of the learner, and collaborative) and constructivist (learning is constructed by the learner based on prior experience, preconceptions, and interactions) approach to designing the sessions.¹⁸

Sessions learning sequence. Two groups of approximately 150 participants engaged in a full day of sessions. The workshop sessions included a large fifty-minute group presentation with 150 participants, followed by four separate fifty-minute facilitated small-group breakouts (approximately sixteen per group), and one separate ninety-minute culminating activity. Session one was led by an expert researcher in the area of emotional management. This session focused on how emotions are made and the roles of emotions in our daily lives.

Sessions two through five included topics such as self-awareness, self-management, social awareness, relationship management, emotional intelligence and leadership styles, and applying emotional intelligence. The small-group sessions included a variety of learner-centered instructional strategies and activities. Participants worked collaboratively to analyze a leadership case study

related to social awareness, relationship management, and leadership. They co-constructed knowledge related to the six leadership styles and their connections to emotional intelligence.¹⁹ Additionally, in session five, participants developed strategies to improve their personal or social competencies and shared those with their group.

In session six—the culminating event—two participants from each small group engaged in a fishbowl activity. This activity, “Emotional Intelligence on the Big Screen,” required participants to apply the concepts learned as they analyzed film clips and responded to facilitator questions. At the conclusion of session six, participant feedback was collected to evaluate the effectiveness of the sessions and to report lessons learned, as described in the following section.

Data Collection and Analysis

Drawing on a thematic analysis of participant responses, we were interested in understanding what participants learned about emotional intelligence during the sessions. This included their plans to change behaviors; especially leadership practices based on what they had learned about emotional intelligence.

Data collection. At the closing of the emotions and leadership workshop sessions, participants were asked to provide feedback. A total of 274 of the 300 participants completed the questionnaire. Two of the three questions were relevant for the purposes of this article:

Q1: What are three things you learned during the sessions?

Q2: What is one thing you may change based on the sessions?

Due to the size of the group and the data being collected, participants were asked to anonymously self-report their responses to the open-ended questions; thus relying on the honesty of participants, the ability of participants to be introspective, and their comprehension of the questions. The data may be limited when trying to generalize but provides insight into what this specific group took away from learning about emotions and leadership.

Data analysis. The first two authors of this article designed and implemented the workshop and the third and fourth authors conducted data analysis. This strategy reduced the likelihood of bias in interpretation of findings and increased the reliability of findings. We engaged in inductive coding by reviewing participant responses to each of the research questions and establishing a coding scheme that reflected emergent patterns. We then expanded and collapsed codes as needed toward the generation of themes.

Findings

Research Question #1: What are three things participants learned during the sessions? As indicated in figure 2 (on page 90), participants most frequently reported learning about leadership styles, emotional intelligence, and the value of emotional intelligence in leadership. Participants also reported learning about the four components of emotional intelligence. Participants reported learning about self-awareness, followed by social awareness, relationship-management strategies, and self-management strategies, respectively.

Leadership styles. The most frequent response to the question of what participants learned was leadership styles. At times, this focused on new knowledge about their own leadership. One person reported, “My leadership style is affiliative,” and another shared, “I am more self-aware of my preferred leadership style.” At other times, responses were less about participants’ own styles and more related to the concept of leadership styles. For example, one person wrote about “the potential impact on climate of various leadership styles.”

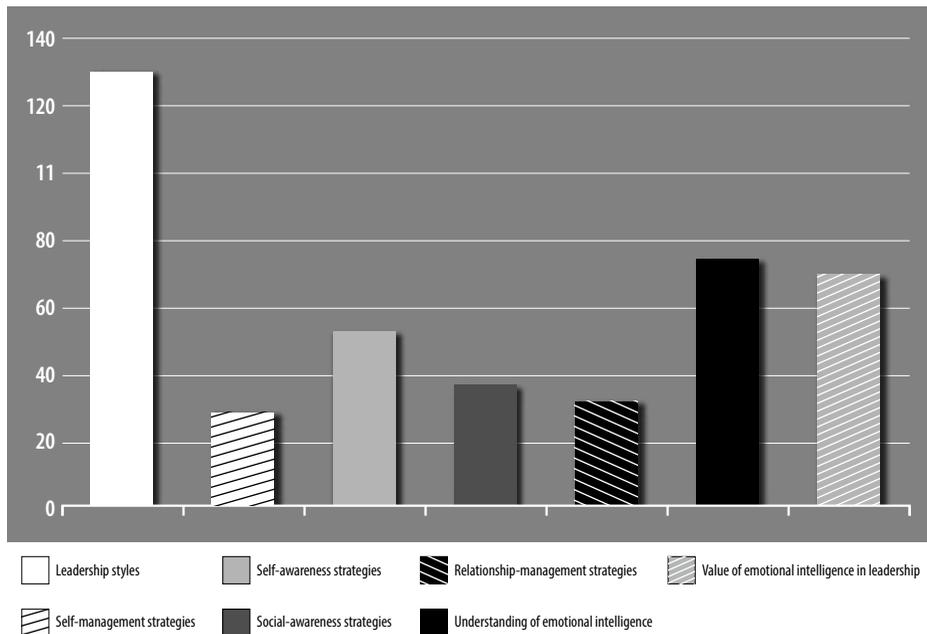
Emotional intelligence. Findings also suggest participants learned about the concept of emotional intelligence. One person wrote, “I had not heard of emotional intelligence until today.” Someone else shared, “I am not as emotionally intelligent as I thought,” and another discussed new knowledge about “how to implement the emotional intelligence framework.” This suggests the importance of foundational knowledge of emotional intelligence as a component of training and development and about its application and connections to leadership—another theme in participants’ reported knowledge gains.

Value of emotional intelligence for leadership. Given the focus of the sessions, participants acquired knowledge about the value of emotional intelligence for leadership and their leadership practices. One shared, “Not displaying emotion properly can limit my leadership just as much as negatively displaying emotion.” Another participant wrote of understanding the connections between emotional intelligence and the ALRM. A new desire to become “more socially and emotionally effective as a leader” was described by another participant.

Components of emotional intelligence. Participants explained how they learned more about each of the four components of emotional intelligence and provided rich examples of how this new knowledge affected their leadership abilities and goals for ongoing development. Some examples include increasing self-awareness, specifically regarding things such as “facial expressions and body language”; improved “self-management strategies”; acknowledgment of the “2nd, 3rd, and 4th order effects” of social awareness; and needed areas for growth in relationship management.

The finding regarding participants’ knowledge gains about emotional intelligence and how it connects to effective leadership is of interest. As one participant responded, “Emotional intelligence plays a huge role in leadership and one’s ability to influence an organization and the people within it.” We suspect participants

may have walked into the sessions with little forethought about the connections between leadership and emotional intelligence. These findings suggest it became clear to participants through the sessions that emotional intelligence is importantly connected to effective leadership via the skill sets of self-awareness, self-management, social awareness, and relationship management.



(Figure by Wes Smith, EdD)

Figure 2. Responses to Question, “What are Three Things You Learned during the Sessions?” (Total responses=421)

Research Question 2: What is one thing participants may change based on the sessions? Key findings related to the second research question are reported in figure 3 (on page 91). Of the 274 respondents, 251 reported they would continue their self-assessment, including various reports of using the “15 percent strategy”—which is a strategy of focusing on the 15 percent of one’s work environment over which one has control. The top two reported priorities for change were improving self-awareness skills and relationship management skills.

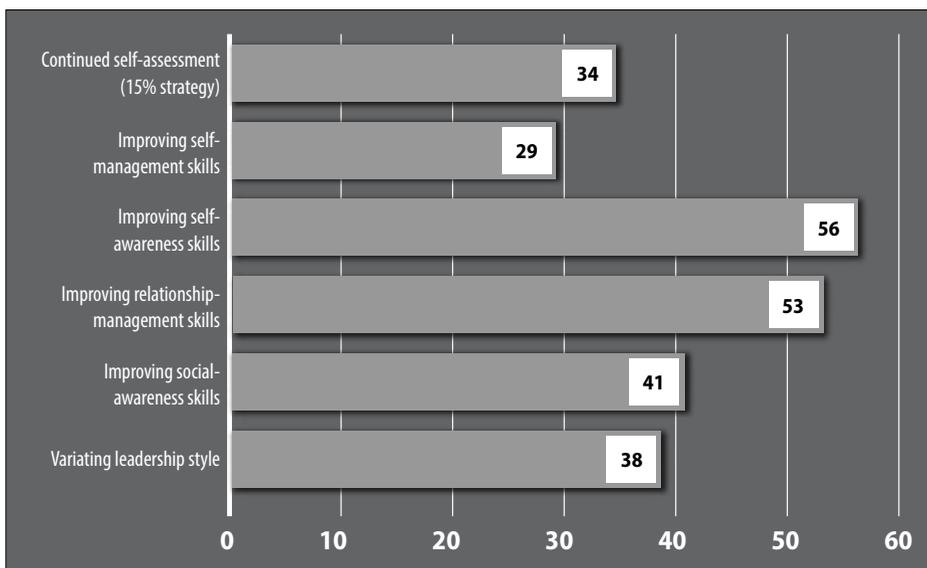
Change related to self-awareness. Themes captured participants’ desire to “[focus on] self-awareness behaviors.” Participants were particularly interested in extending their self-awareness to understand how they affect others so as to improve the working environment. These responses included: “Becoming more self-aware of how my emo-

tion impact others,” “Recognizing what makes me uncomfortable and working to overcome the stimulus,” and “Naming the emotion to avoid/mitigate an emotional hijack.”

Change related to relationship management. Participants recognized the value of exchanges with others in the workplace. Their responses offered improvement actions to influence others, inspire leadership, develop greater collaboration, or strengthen teamwork. For instance, one person shared plans to “take into consideration the emotions of others when I interact with them.” Many stated plans to seek strategies to cultivate those relationships.

Other areas for change. As indicated in figure 3, other themes that emerged were improving social awareness skills, varying leadership styles, continued self-assessment, and improving self-management skills. Respondents reported plans to be more emotionally aware and described multiple areas in which they would apply what they learned about themselves. For instance, participant responses included: “I would like to be more deliberate about identifying the emotional state of people in my organization,” and “Improve my way of complimenting others’ emotions to balance the situation.”

Perhaps most interesting, participants advanced the ideas of demonstrating the linkage between emotions and leadership approaches as an area in which they wish to change. Some participants reported a response similar to this one: “I will change how I approach leadership challenges.” Others applied the lesson to appreciate variability in settings/context as a mental shift to apply different leadership styles.



(Figure by Wes Smith, EdD)

Figure 3. Participants’ Self-Reported Areas for Development

For instance, selected participants responded in a manner similar to these entries: “My consciousness of the need to change styles based on audience,” and “I will use emotional intelligence to adapt my leadership style to change within the context of each situation and apply this to cadet training and my organization.”

This session furthered participants’ understanding of how emotions are more than feelings to be ignored or warranting desensitized responses; that emotions have a place in leader development and effective organizational performance.

Discussion

There is a gap in leaders’ understanding of emotional intelligence and a corresponding need for leader development to close that gap. Our aim was to explore the potential of integrating emotional intelligence into Army leader development strategies, and to describe and report out lessons learned from one attempt to do so. Findings from this analysis support Mayer, Salovey, and Caruso’s conclusion that emotional intelligence is a learnable skill.²⁰ Through a series of six sessions over seven hours, participants demonstrated self-reported growth in their understanding of emotional intelligence, how it relates to their leadership practice, and how they plan to adjust their leadership behaviors as a result.

Interestingly, workshop participants connected their personal leadership styles to their understanding of emotional intelligence. This is likely, in large measure, due to reliance on Goleman’s text as prereading and the framing of the workshop around that—which includes an emphasis on six leadership styles.²¹ The Army has moved away from leadership styles in its leader development effort due to a lack of empirical evidence that they are related to behavioral outcomes. Yet, that component of the workshop clearly caught participants’ attention. This would suggest a need for reliable instruments that allow leaders to quickly come to a greater understanding of their personal styles, personalities, traits, and biases. Such instruments might be incorporated into future emotional-intelligence-focused leader development workshops. It seems participants are likely to engage with workshop material when it teaches them something about themselves, to which they can then connect the more general lessons and applications of emotional intelligence.

We recommend those within the Army training and education enterprise—and related areas across the U.S. military—consider the lessons learned from this intervention and analysis in their own leader development initiatives. Findings suggest the value of emotional intelligence when training leaders in all organizations, including the corporate sector, communities, and even within families. Organizational leadership may benefit from careful consideration of the value of emotional intelligence training within their teams, as well as what actions they may take

toward that end. Examples include resource allocation and addressing emotional intelligence in communications, strategic visioning and priority-setting, and other cultural indicators of one's goals and objectives as a leader.

Conclusion

The leadership of the twenty-first century U.S. Army must demonstrate self-awareness, social awareness, self-management, and relationship management. Taking steps to improve in these areas has the potential to enhance team cohesion, creativity, decision-making, and relationship satisfaction. Effective leadership is directly related to improved team performance. This study, and others, suggest emotional intelligence is connected to effective leadership; as such it is also linked to improved performance. For this reason, we view it as an imperative area for leader development within the U.S. Army. ❧

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Educating Soldiers in a Virtual Environment

Thomas E. Hennefer, PhD

Abstract

We live in a fast-paced world where technology changes the way we communicate daily, especially in military systems; the same can be said for distance education, where traditional education or “Sage on a Stage” has been replaced by learning management systems that allow students to interface with classmates and instructors on a global campus in a twenty-four-hour environment where the only limitation is effective and reliable internet access. As military personnel continue to expand their knowledge and complete their professional military education, the demands placed on individual soldiers will require a new set of skills, technology, and support from NCOs and officers. This article will explore the challenges, resources, and dedication it will take for both the Army and its personnel to assist soldiers in the completion of their formal education and make the opportunity of continued education a key component of advancement for both officers and enlisted personnel.

While teaching an online course on terrorism, I received an email from a student who was a marine scout-sniper in Afghanistan asking for an extension on a midterm writing assignment. In the email, the marine explained he was *actively engaged* with the enemy, and having to “shoot-n-scoot” was a bit challenging while trying to complete a major writing assignment on a laptop from the field.

While this is not a situation instructors usually deal with in a traditional brick-and-mortar university (the normal excuse is the same relative dying for the third time in one semester), it is the new reality active-duty military students face as they continue to pursue a military career and education. In addition, it is where we as instructors, educators, academics, officers, and noncommissioned officers (NCOs) will need to become more adaptable as a higher percentage of soldiers seek professional military education (PME) outside of the traditional classroom.

Having taught in excess of 150 graduate and undergraduate courses online for over a decade, I have observed many examples firsthand of students who have excelled in the virtual classroom and many other examples of those who have not. The biggest

challenge has been how to educate the soldier who is not only operating in a virtual academic environment using one of many learning management software applications such as Blackboard, Canvas, or eCollege, but who is also posted on a forward operating base halfway around the world with limited (if any) internet access. The question most soldiers in this situation ask is, “How do I achieve my degree completion plan while performing my current operational duties?”

With any military education, the desire of the student for that education and his or her ability to manage personal time is essential for success. So is the support of the individual’s commander or NCO, regardless of the rank of the student or the academic courses and degree he or she is pursuing.

This article will explore lessons learned in delivering college and graduate courses to active-duty military students, the challenges they face, and the technology used to help them achieve their academic goals. It will also examine how an educational organization such as Army University can best serve those students (active duty or Army Reserve) and how the military can make the opportunity of continued education a key component of advancement for both officers and enlisted personnel.

Warrior-Students

Every year, thousands of students graduate from high school. Traditionally, the high school administrator conducting the graduation ceremony (obviously eager to please the audience) announces the percentage of graduates who will be attending college the next fall. However, what such officials usually do not discuss is the number of students from the class four years prior who failed to graduate from college with a degree. To do so would be depressing, considering how few students who leave the K-12 system actually complete a college program in the prescribed four- to five-year course of study.

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Notwithstanding, the challenges students—whether civilian or warrior—face in completing a course of study are the same and often overwhelming.

According to the Complete College America website, only 5 percent of those attending college complete their associate degree within two years and 19 percent of students complete their bachelor's degree within four years.¹ To put it another way, 95 percent do not complete their associate degree within two years while 81 percent do not complete their bachelor's degree within four years. So, what happened?

For both nontraditional students and those returning to college after a prolonged absence, the psychological challenge of academics can be overwhelming, especially if they are the oldest students in the classroom or older than the PhD teaching the course. In my experience, the biggest need for overcoming the challenges such students face is the development of exceptional study habits, which includes learning personal habits of time management, research, writing, formatting, and the use of an appropriate style guide such as the Modern Language Association's *MLA Handbook* or the *Publication Manual of the American Psychological Association*.

Life is usually complex in any event, and for those in the military pursuing a college degree part-time, it is especially challenging when taking into consideration other time-consuming responsibilities associated with family, annual training, career, temporary duty, or extended and repetitive deployments. Even in the best of conditions, rare is the virtual student who breezes through a degree plan without distraction or complication.

Unlike civilian students, the challenge of being an active-duty soldier adds to the difficulty of university study since, unlike their civilian counterparts, soldiers lack the luxury of declining an invitation to deploy whereas a civilian has more freedom and discretion when it comes to lifestyle choices and participation in other activities that might distract from their academic time. This is best illustrated by the sign a colleague had on his home office door while completing his dissertation that read, "Unless you, the house or your brother are *literally* on fire, don't knock on this door."

One of the additional tests facing the military student is an absence of academics or classmates with a shared military experience. This is apparent in the percentage of Americans who currently serve in an active or reserve status compared to the rest of the American population; those who are personally prepared to respond "the moment the war tocsin sounds."²

Academic Preparation

There is a Portuguese proverb that says the person who is well prepared has already won half of the battle, and the same is true for the soldier whose hard training makes for easier fighting. However, one reason that students (civilian or military) struggle, especially in their first few courses, is their lack of personal

preparation. As anyone who has observed the first hours of Ranger School or the induction process at any Marine Corps recruiting depot can attest, preparation before the need arises is the best course to victory before the battle is fought.

Besides time management and personal dedication to the objective of receiving an academic degree, each warrior-student needs the basic skills and equipment necessary to engage in the academic process. Without them, he or she will struggle and fail to achieve his or her academic objectives. So what are these basic skills and tools required to win in the academic environment?

Financial Support

If a soldier is constantly trying to balance the financial demands of an educational institution against the needs of his or her family, one priority will always lose to the other. And while the military offers excellent educational compensation, some students might be unaware of the process for gaining financial support, the benefits they have earned, or how to access those benefits. This is where mentoring by the chain of command can help guide the prospective student through the maze of paperwork and confusing terminology. Once the financial obligations of tuition, books, transcripts, and technology have been addressed, the student is more likely to focus on his or her course syllabus and not on where the next car payment is coming from.

Academic Maturity

In any academic work, the level of rigor is often equal to the caliber of the major area of study or the quality of the institution where the student is enrolled; the harder the course, the higher the standards, the fewer the number of graduates. Consequently, for a student to be successful academically, each must prepare him or herself emotionally, physically, and mentally for the same academic rigor as those enrolled in any of the Army's more challenging schools. For example, as former Ranger School instructor John Spencer stated, "For any soldier preparing for Ranger School: Expect to be tested, physically and mentally. Expect it to hurt. Expect to be hungry, and cold, and tired."³

While the difference between the classroom and an operational area is obvious, what many warrior-students fail to realize when they enroll in a class or course of study is that a virtual classroom can be, and often is, more challenging than anticipated since, unlike the physical classroom, there is no roll call to see who is in attendance and who is not, no one demanding the student turn on the computer and engage in the weekly discussion, submit an assignment, or take a quiz. Self-dis-

cipline is a must; it is all up to them. As a colleague is fond of saying, “The hardest part of a workout at the gym is just getting out of the house.”

Since the online student is often “flying solo,” the desire for successful completion of the academic degree in many cases has to be at the price of an almost fanatical dedication to that mission, since the student will be required to commit most of his or her personal off-duty time to reading, researching, and writing. Additionally, though a majority of the research information needed can and often is accessible online, there is still the basic need to visit a library, submerge oneself in the “stacks,” and develop a relationship with a professional librarian whose insight and access to undiscovered nuggets of knowledge can be priceless.

The common misconception with online versus virtual classrooms is that the latter is easier and less academically rigorous. Nothing could be further from the truth. What students often fail to understand is that the only difference (usually) between a physical and a virtual class is *convenience*. So, for virtual students to excel in reaching their academic goal of graduation, they will need well-defined and well-developed sets of individual study skills and the mental toughness to weather the academic storm in their free time while finding a balance among career, family, and academic studies.

Student Competency

Often, a student takes a course only to discover that the skills he or she acquired months, years, or even a decade or more previously have atrophied; moreover, those academic skills he or she learned in K-12 may have become somewhat obsolete and not enough to keep pace with the class materials and study requirements. Another issue is that students might mistakenly project their future academic success based on past academic experience, believing that being a former “A” student means they will continue to perform at that level. As an example, a daughter of one of my colleagues was valedictorian of her high school graduating class. She had very high ACT and SAT scores, and eventually was accepted at the Massachusetts Institute of Technology (MIT). However, to her and her parent’s dismay, she discovered that in comparison to her classmates at MIT, she was an average student; in that academic environment, her contemporaries functioned at the same high academic level she did, which was reflected in a grading curve in which she was not always an “A” student.

This illustrates that while a student may come to university study with strong study skills and a sense of inevitable entitlement to success, the environment he or she functions in (not to mention distractions) and the pace of instruction may add to an already frustrating academic journey toward graduation due to his or her academic standing being lower than expected.

Remedial Education Prerequisites

One area that negatively impacts student success is the need for remedial education courses, usually identified as a requirement after testing by a university testing center. Remedial requirements to demonstrate basic connotative reading, writing, and mathematical skills are often dismissed as unnecessary by far too many for-profit universities. Such courses are perceived as needlessly delaying students' participation in regular academic work, which also impacts the ability of the university and students to receive financial aid. Some universities even go so far as to rename remedial courses so the students' self-image or ego is not damaged by having to participate in what could be perceived as lower-level courses. Notwithstanding, forgoing recommended remedial courses could leave a student unable to perform or complete complex college-level assignments, often resulting in that student either failing or having to repeat the course, or dropping out of academics completely.

For a returning student to be successful, he or she must have the skills and abilities to comprehend and complete coursework assignments; hence, the need to prequalify students *before* taking mainstream courses is paramount to them staying the course until graduation. As indicated in the paper "Does Literacy Skill Level Predict Performance in Community College Courses: A Replication and Extension," previous research has found a positive relationship between students who completed a sequence of developmental reading and writing courses and success in a reading-intensive college-level course.⁴ Thus, universities would perform a great service if a majority of returning students were required to complete a system of preacceptance evaluation prior to the start of any academic term. Some students might even be able to "test out" of a class by demonstrating mastery of the course information and concepts before taking a course.

As a further example, a professor told me about a student who took a midterm exam for a Managerial Economics 101 class. Although the student arrived early and was the last to leave, the only mark the professor found on the student's paper after the test was the student's name. Further investigation by the professor revealed the student read at the eighth grade level, but since the school had an "open door" policy, the student was allowed to matriculate into the student body. The professor suggested that the student take a remedial reading and math class in an effort to give the student a fighting chance for success in the course, but the professor was told that the college did not believe in remedial classes since it would be detrimental to the student's self-confidence and give the perception that the student was less than academically prepared for college-level work. Predictably, the student failed to complete the course.

Currently, the national six-year completion rate for undergraduates on average stands at 39 percent. Part of the reason is that community colleges, with their commitment to open access, admit millions of students each year who are unprepared for college-level work, even though attendees have received a high-school diploma.⁵ What this example represents is not the inability of the student to eventually do col-

lege-level work but rather serves as an instance of ineffectiveness of the local K-12 system to educate and prepare students to be successful in their academic journey. Had the student in question been able to successfully complete remedial courses, the chances of his or her academic progress would have been greatly enhanced.

Adult Learning

While all soldiers are considered adults, not all soldiers are adult learners. An adult learner is generally considered a student aged twenty-five or older.⁶ Adult learners often have higher expectations of the material being presented, the credentials of the instructors, and how the information being presented relates to the students' goals and career plans. As indicated by the pedagogical theory of Malcolm Knowles,

1. adults need to know why they need to learn something,
2. adult learners need to be self-directed,
3. adults draw heavily upon previous experience when learning,
4. adults are ready to learn in order to cope with real-life situations,
5. adult learning is task-centered or problem-centered in order to deal with life situations, and
6. adults are motivated to learn.⁷

Not everyone learns in the same manner, and motivating students to learn—even Army students—can be problematic based upon the individualistic nature of learning. While the concept of self-directed learning may imply that adults require little, if any, direction and guidance from a teacher, the reality is much different. Because adults have different levels of maturity and self-direction, there is no “one-size-fits-all” solution to their education.⁸

Some people are natural promoters. They are born with the instinct to self-promote. However, many other Army students who sincerely want to finish a degree program are often caught among the responsibilities of service, home, family, and finances, and often unknowingly, succumb to the symptom known as “call reluctance.” For many of the most loyal, motivated, and deserving personnel, self-promotion is emotionally difficult. As a result, they are rendered invisible by a spirit-crushing condition called the fear of self-promotion.⁹

In generic sales terms, call reluctance is the psychological incapability of a salesperson to make a sales call or approach a customer for fear of being rejected. Paradoxically, if a sales call or customer approach is not implemented, then the salesperson cannot be rejected but fails in his or her goal of making a successful sale.

For soldiers, the same paradox is true. If PME completion is required for promotion, then the soldier needs to be successful at completing PME. But, if the soldier lacks the confidence to take the PME classes, or fears public speaking or test taking, then he or she might avoid taking the required courses, will not graduate, and will

not be promoted. Some students are terrified of public speaking so they avoid it at all costs. Others are terrified of written exams, so they avoid classes where those types of evaluations are more usually encountered. While these phobias may seem unrealistic or counterproductive, they are as real as any other phobia such as the fear of heights, water, spiders, etc.

An effective way to increase warrior-student success in overcoming such phobias is making the academic process more personalized and interactive—that is, making the warrior-student an active participant in the courses he or she takes, the environment in which those courses are taken, and the preparation he or she makes before the academic journey begins. One way to facilitate this is to have a formally written and clearly defined degree plan listing all the courses required to graduate, the sequence in which the courses should be taken, and the time it takes to complete the degree plan and graduate. Without a specific and well-defined degree plan, there is the temptation to treat academics as an *intellectual buffet* where students take courses that appear interesting but are not applicable to the listed graduation requirements, and where a student ends up with credits that are not applicable to any defined major. The degree plan approach allows the student to visually measure his or her progress, see what courses are available the next semester or quarter, and importantly, how close he or she is to graduation.

Adults also have the need to independently organize their learning around their life experiences and problems.¹⁰ As self-directed learners, adults desire some level of autonomy over their learning experience as well as shared ownership of the outcomes.¹¹ Learner control, including control over topics, sequencing, pacing, and access to supporting resources has been shown to be a major factor affecting student motivation.¹² Learner control over the acquisition of knowledge as well as the process for acquiring it is an important aspect of self-directed learning and is strongly tied to motivation.¹³ Thus, adults desire some level of control over their access to learning resources, the learning process, the learning objectives, and the process for evaluating whether the objectives have been met.¹⁴

Self-Regulated Learning

One of the most important issues concerning warrior-students is that adult learners need to be self-directed, since without self-direction (also known as self-regulated learning), the student will find other (usually more pleasurable) activities to take up the time dedicated to academics.

While some students require absolute silence when applying their study habits and skills to specific courses, others can work in a room filled with people and still focus on the coursework; there is no single right approach. It all comes down to what works for that specific student, and what works for one student may not be effective for another.

At the end of the day, the driving forces have to be self-determination and dedication by the student toward academic achievement. Without it, the student will find it impossible to complete all academic coursework, especially if he or she is doing it for someone other than himself or herself such as a parent, spouse, commanding officer, or NCO. Edward Deci and Richard Ryan stated that students who comply with the teacher's demands because they want to obtain a certificate are not intrinsically motivated.¹⁵ They might easily disengage from the task or activity when obstacles and distracters interrupt their actions.

Choosing the Right Institution

Few issues in academics are more important than the choice of the right academic institution or major area of academic concentration for a student. Unfortunately, this is a topic seldom discussed since the trend in academics is still the "one size-fits-all" opinion.

Higher education institutions are very diverse. There are over 4,600 degree-granting postsecondary institutions in America. About one-third are public and two-thirds are private. About two-thirds are four-year institutions and about one-third (less than 1,600) are two-year institutions, including community colleges and technical and vocational schools. Most two-year institutions (57 percent) are public, and by far, most four-year institutions (77 percent) are private. Among private institutions, a slight majority (54 percent) is nonprofit; the rest are for profit. Over the past two decades, the number of for-profit higher education institutions has more than quadrupled, from 345 in 1994 to 1,424 in 2014.¹⁶

When choosing the right school, military students are faced with different criteria than those found in the civilian world. Civilians are rarely deployed for extended periods of time to locations where internet access is at best problematic. That said, those in the military have to take into consideration issues such as repeat deployments; access to technology; sympathetic institutions and professors; conversion of PME courses from military to civilian credit hours; and the credentials, accreditation, and reputation of the degree-granting institution.

Accreditation is an essential system for validating that professional and educational programs of higher-level educational institutions actually have the acceptable standards and levels of performance, integrity, and quality that entitle them to the confidence of the educational community and the public. The loss of accreditation is tantamount to a death sentence. Without it, colleges and universities are ineligible to receive federal aid, a major source of financial support, without which they are unable to operate. According to the federal government's new College Scorecard, "It is one thing to graduate from Harvard with \$30,000 of debt, and quite another to graduate from the University of Phoenix with \$30,000 of debt."¹⁷

This researcher has taught in the physical and virtual environments at graduate and undergraduate levels in for-profit and nonprofit schools for ten-plus years using a wide range of learning management software to teach over three thousand students: civilian and military, domestic and deployed. In my experience, the following criteria seem to work best for students and faculty.

First, an academic institution needs to have a physical campus; not a rented space in a strip mall or office building. This is important because at some point, a student or family will attend graduation, and the institution needs a place other than the local Holiday Inn to hold graduation proceedings. A physical campus presents palpable evidence indicative of a certain level of commitment, permanence, and legacy. Also, faculty need a place to meet and advise students, conduct research, or hold faculty governance and committee meetings other than by email, Skype, FaceTime, or GoToMeeting. A physical campus offers both faculty and undergraduate students a place to conduct research, obtain grants, and add to the body of knowledge.

Second, full-time and tenure-tracked faculty need to outnumber adjunct faculty. Three quarters of nontenure-tracked faculty in the United States are part-timers. In 1969, 22 percent of the academic jobs were for adjuncts. Part-time teaching staffs are allocated the introductory, demanding classes like first-year student composition. There is almost no time to apply for permanent jobs and to write scholarly pieces.¹⁸ Adjuncts teach from contract to contract every six to eighteen weeks with no certainty of another contract. They receive no health care, retirement, research funding, dedicated office or desk space, or access to many department resources. They rarely sit on committees and are often passed over for leadership or full-time positions when those become available. Adjuncts also are underpaid compared to full-time or tenured faculty (often 75 percent less), even though they have the same, if not better, academic record on publishing in peer-reviewed journals, postdoctoral employment, and the coveted but hard-to-complete PhD.

The notion that adjunct faculty choose part-time teaching to earn extra money, give back to the community, or are retirees is not a reality.¹⁹ The majority (70 percent) of faculty positions today are both part-time and off-the-tenure track. While they are difficult to pin down exactly, median wages for adjuncts in the United States in 2013 are estimated at about \$2,700 per class, with annual salaries amounting to roughly \$20,000–\$25,000. In parallel, colleges and universities in the United States have been abandoning their long-term faculty commitments. Over the last forty years, the share of the academic labor force holding full-time positions with tenure has declined 26 percent, and there has been a 50 percent decrease in the share of those holding full-time positions on the tenure track.²⁰ Conversely, full-time faculty members presumably have stability, health benefits, and resources. As full-time faculty members do not scramble between multiple job responsibilities, they have time to connect with students through advising, student activities, and tutoring.²¹

Student development research confirms that students' connection to the institution increases student retention.²² Specifically, it notes that faculty involvement remains a compelling element for student engagement and connecting students to the subject matter. Yet this engagement cannot occur if the faculty member is running to a second teaching assignment across town. Therefore, in the post-recession environment with a federal mandate to offer more post-secondary education, administrators are left considering both the cost and the quality of education.²³ Institutions need to support and encourage independent research, grants, fellowships, and world-class research libraries. The hallmark of any great university is a distinguished faculty reputation for research in all aspects and departments supported by access to a superior physical and virtual research library; anything less and it is just another trade school.

Universities are critical venues for research and development in all disciplines. An important element in the research process is the accessibility of information resources and services provided by libraries. Postgraduate students are key producers of research in universities, and an important element in their research process is access to information.²⁴ At research universities in the United States, it is a given that faculty must publish to earn tenure and promotion. The lack of a substantial publication record means that earning tenure may be in jeopardy. Of course, many academics publish for other reasons, including personal motivations to communicate the fruits of their work to as wide an audience as possible.²⁵

Leadership Support and Mentoring

When someone walks across the stage to receive an academic diploma, be it for a bachelor's, a master's, or a doctorate degree, he or she realizes that without support, the journey would have been much longer and potentially impossible. Considering the unique challenges faced by military students, mentoring by NCOs and officers to get such support is essential, especially in an era of increased operational activity.

Since the Persian Gulf War of 1990–1991, the operational tempo for soldiers has steadily increased, whereas the numbers of soldiers available to fulfill these missions has decreased.²⁶ As a result, soldiers and their families are experiencing increased levels of stress that continue to manifest in ways that can often be destructive for the soldiers, their families, and the Army community.²⁷

As anyone can attest who has attended the Army's Command and General Staff College, the War College, or the Noncommissioned Officer Academy, PME courses are rigorous and stressful. The same can be said for the situation of a soldier assigned to a forward operating base in Afghanistan or Iraq who must contend with spotty internet access and demanding academic courses while performing combat operations and coping with family separation.

Additionally, while military students seek academic degrees essential for career advancement, they must also consider attendance at requisite PME courses throughout their careers. PME leader development is vital to organizations working within multifaceted environments. Complicated, uncertain, and increasingly dynamic situations require highly trained, skilled, and experienced leaders. Leaders must think, exercise judgment, and make decisions to be successful.²⁸

With all these challenges, *mentoring* is essential to help warrior-students succeed in attaining their academic and PME goals. Mentoring is a developmental relationship in which a more experienced person serves as a guide, role model, teacher, and sponsor for a less experienced person—usually in the same organization. A mentor typically becomes invested in the career progression and development of the protégé or mentee and often provides such essential functions as counseling, challenging, and supporting.²⁹

Conclusion

One of the biggest challenges of the future operational environment will be soldiers with cell phones who can (while on patrol) call anyone on the planet; their parents, their spouses, or even their buddies at home. We already have that technical ability, and the warrior who is also a parent now may likely be able to Skype or FaceTime with his or her children regardless of where the soldier is deployed and speak to them in real time. This is far different from having to scribble a quick note on a C-ration box as was done just a generation ago, sent by mail from a jungle halfway around the world.

Advances in computers and communication now provide us with the ability, opportunity, and challenges of educating our warrior-students in a virtual environment; how we meet this new educational paradigm will determine the military's ability to retain and recruit new, smarter, and more adaptable personnel. Such recruits will expect that the technology, access, and opportunities related to educational advancement they left behind in civilian life will be available in the military, not represent a giant leap backward. ☞

This article is dedicated to 2nd Lt. Rachel Hennefer-Seegmiller, U.S. Army, and Senior Airman Kristopher Hennefer, U.S. Air Force.

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The Army Learning Coordination Council as a Change Catalyst

Exportable Educational Change Management for the Twenty-First Century

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Abstract

The Army learning enterprise is geographically dispersed and is among our nation's largest training and education organizations, surpassing in scope and scale most educational institutions in the number of students and in its impact across the workforce of the U.S. Army. Given the changing dynamic of the current operational environment, change within the learning enterprise is a constant. Army University, however, has a responsibility to adapt to this changing environment while maintaining the rigor of military training and education. Using the principles of organization design's change management, this article examines how Army University is able to make meaningful and timely change while maintaining relevancy and rigor of curriculum.

As noted in the executive order that brought it into existence, "Army University is not a brick and mortar structure; it is a virtual, distributed, constructive, and collaborative learning environment encompassing existing Army education institutions. The Army University connects professional military education [PME] institutions across the Army into a single educational structure."¹ With a charter that impacts the learning opportunities for over three hundred thousand adult learners annually, Army University requires an adaptable change engine that preserves the rigor required from today's PME while leveraging technology and methods that support the modern Army. The Army Learning Coordination Council (ALCC) could provide just the needed engine for Army University, which has a vast and diverse student population in many different subelements and institutions.

The Army Learning Environment

To set the stage for envisioning the ALCC as Army University's governance forum, we first frame the prospective relationship as it pertains to the overall Army learning environment. The *U.S. Army Learning Concept for 2015* describes the Army's learning model as one of continuous adaptability. To achieve the purposes of this model, the Army developed two goals and resourced the means to achieve them.

The first goal was to improve "the quality, relevance, and effectiveness of face-to-face learning experiences through outcome-oriented instructional strategies that foster thinking [and] initiative, and provide operationally relevant context."² The second goal was to create an Army culture of lifelong learning. To help achieve these goals, the Army planned to connect its thirty-two resident educational institutions to the global operating force through the use of improved technology at the same time it implemented instructional methodologies designed to leverage the technology to achieve the desired learning and educational outcomes. Concurrently, the learning concept described the addition of greater rigor to the implementation of the learning model through frequent learner assessments. Such assessments were intended to drive change and allow the Army to gauge its level of success in goal attainment.³

Army Adult Education Overview

The Army operates one of the largest adult education programs in the world in a system that conducts training at each phase of the career cycle of every soldier, from accession as a new member of the Army throughout the remainder of his or her career.⁴

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Almost every month, the Army takes in almost ten thousand new enlisted service members as well as officers through the United States Military Academy, various Reserve Officer Training Corps programs, and direct commissions, all of whom require basic branch or military occupational specialty training as well as other specialty training.⁵ Beyond basic qualifying training, every service member undergoes additional training at each juncture of career advancement. As a result, each year, over half a million soldiers are trained at thirty-two Army training and educational institutions located throughout the Nation.⁶ Given the size of the Army, the Army Reserve, and the Army National Guard, this equates to roughly a quarter of Army-affiliated military personnel trained annually.⁷ In addition to schoolhouses, the Army has invested heavily in technology to develop its long-distance learning capabilities through the internet, which now enables soldiers to obtain training anytime and anywhere there is a need to learn.⁸

The Army as a Leader in Developing Adult Education

As one of the Nation's largest educators of adults, the Army has significantly modified its learning strategy regarding curriculum and faculty development, incorporating the principles of adult education to cultivate an Army culture of lifelong learning.⁹ One result is that the Army has moved away from a large class-size, lecture-based conveyance of curriculum to a small-group, facilitated-discussion methodology. This approach capitalizes on integrating the learner's personal experiences with military concepts and sharing them with other learners. Similarly, the Army has moved away from a content-centric curriculum to a learner-centric educational process.

A review of Army educational research and literature highlights an increasing understanding and employment of the learner-centric approach.¹⁰ For example, several years after incorporating the adult education principles into its training and education, the Army assessed itself and concluded, "Soldiers and Army civilians who develop training and education must consider future learner capabilities and needs."¹¹ To meet this internal challenge, the Army sought to combine the outcomes of self-directed learning, institutional training and education, and personal experience. While each of these Army education components integrate their assessment methods, the true measures of quality education and training remain the progressive development of individual soldiers prepared for positions of greater responsibility and the overall readiness of the soldiers' units. Therefore, the *Army Learning Concept* calls for inventiveness and advances in learning technologies and methods to meet the stated goals of mission readiness.¹²

While the Army has already adopted a more holistic approach to educating soldiers through the establishment and resourcing of Army University to codify learning strategies and goals, the question remains whether it has done so effectively. Has it established Army University in such a way as to serve as a catalyst for change in an academic environment? This article proposes that it has and provides

concrete examples of relevant outcomes. It proposes a strategy that could be adopted by other academic institutions and learning organizations seeking adaptability in an ever-maturing learning environment.

Army Learning Coordination Council (ALCC)

After nearly two decades of war, the Army understands the criticality of adaptive and agile soldiers, combat organizations, and home-based institutions. The Army's central warfighting function, mission command, has as one of its tenets, "building cohesive teams through mutual trust."¹³ While research indicates that trust among individuals and their supervisors correlates to proximity, the same research indicates this may not be true for organizations.¹⁴ While proximity appears to aid in the building of trust, when subordinates are physically separated from their parent organizations, trust may be established when the subordinate examines the accomplishments of the higher organization.¹⁵ Given the geographical dispersion of Army's centers of excellence and the Training and Doctrine Command's (TRADOC) schools, consideration should be given so that the trust created through knowledge of accomplishment may serve as an enabler to achieve organizational adaptability within TRADOC.

An example of the application of mission command and the building of cohesive teams through trust is the ALCC. The ALCC and its subordinate committees have served as a multilevel, cross-functional virtual gathering space since 2011 for the Army's centers and schools to realize the implementation of the learning model. Army University, in partnership with TRADOC, utilizes the ALCC to codify the effectiveness of PME, ensuring it is sequential and progressive, and providing the desired knowledge and skills at the right place and time. For example, in 2017, the ALCC began examining the process for assessing and approving course growth initiatives, highlighting the forum's utility in ensuring rigor in PME courses while also simultaneously ensuring all avenues to change the courses, other than growth, have been exhausted.

Certainly, course growth within TRADOC has been managed prior to the establishment of the ALCC, and many of the ALCC's accomplishments would have been successfully achieved had the ALCC not been chartered. In fact, three forums that the ALCC may move an item to for resource consideration—the Army Profession Leader Development Forum, the General Officer Steering Committee, and the TRADOC Commander's Forum—all predate the ALCC. Chartering the ALCC provides regular engagement opportunity with senior leaders across TRADOC and is built upon preceding successful processes. The value of the proliferation of proven processes coupled with the regular engagement of TRADOC's corporate leadership results in increased collaboration across boundaries, shortened decision and innovation cycle times, and an increased ability to leverage best practices.¹⁶ The ALCC's committees and subcommittees have created a virtual, matrixed organization capa-

ble of supporting the implementation of strategy, facilitating the flow of work, and permitting effective managerial control.

Educational Change Management

The ALCC achieved success through the establishment of committees and subcommittees as a quasi-matrix organization. Matrix organizations combine the unit structure and functional structure of an organization to increase cooperation and communication across organizational silos, to respond quickly to changes in the environment, and to deliver work across the organizations more effectively.¹⁷ While the ALCC crosses organizational and functional boundaries, the challenge has typically been in achieving the mindset and culture necessary for the matrix entities to achieve their desired outcomes.¹⁸

In the case of Army University, the autonomy of the centers and schools can present a conflict of loyalty between the functional representative and the ALCC project leads. The centers and schools have a general-officer-level command structure and are rightfully empowered to develop the best training and education opportunities for their respective branches and warfighting functions. However, these programs must reflect the overall guidance provided by the Combined Arms Center (CAC) and TRADOC to establish a coordinated educational baseline that promotes readiness across the force. Likewise, project development such as an enterprise library system or the alignment of vocational certifications can prove difficult due to the independence of each center and school.¹⁹ Matrix organizations, however, have been shown to overcome these hurdles when three conditions exist. First, the team—or in the case of the ALCC, the committee—needs to embrace multiple areas of focus such as technology and student requirements. For example, a registrar committee focuses on the inherent technology associated with modern registrar systems and the desire to achieve a trusted Army transcript for every soldier.

Second, work must be especially complex or interdependent. Using the registrar example, the committee must integrate the upcoming fielding of future Army information systems, the integrity of data in a registrar system, and the disparate registrar systems currently in use across the learning enterprise.

Third, resources need to be shared for maximum efficiency.²⁰ In the Army's learning enterprise, centers and schools are resourced and empowered to act with autonomy in regard to their student population and to their respective warfighting function. While this third condition for high-performing matrixed organizations may prove elusive, the trust established through the execution of mission command has likely offset the seeming absence of this third condition. The evidence is in the outcomes and initiatives of the ALCC.

Each organizational design has inherent advantages and disadvantages.²¹ To offset any of the three aforementioned conditions necessary to overcome organizational

silos, organizational designers employ lateral capabilities. Lateral capabilities enhance the connections between groups or divisions, in this case, among the centers and schools comprising the learning enterprise. Lateral processes help organizations share information across boundaries. There are five kinds of lateral capabilities: networks, lateral processes, teams, integrative roles, and matrix structures.²²

Networks. The first two lateral capabilities, networks and lateral processes, can occur naturally.²³ In regard to the committees and subcommittees of the ALCC, members participating in committees bring with them their respective networks and lateral processes. The ALCC committees combine the individual networks of the members and create a powerful lateral capability. This combination of networks begins to break down the silos of information among the centers and schools thereby creating a momentum of information sharing that effects change in what might have otherwise been a rigid organization.²⁴

An example of this capability would be the library enterprise initiative. Each center and school within TRADOC collects and maintains a library of curated resource sets as well as information regarding their community's unique capability and organizational history. These resources exist in a variety of formats including print, electronic, audio, and video; in addition, resources are both owned and leased by the libraries.

Over the past twenty years, these library staffs worked hard to digitize print materials to make discovery easier and better enable research. The curation and digitization work occurred under the autonomy of the schools. As a result of this locality of effort, access to library resources is restricted to the respective geographical location, limiting the ability to conduct research crossing school boundaries.

When Army University was established in 2015, one of the initial tasks assigned was the creation of an integrated library enterprise system that would enable a researcher to discover resources owned and leased by all the enterprise libraries from a single search box from any geographical location.²⁵ Army University subsequently established the Library Enterprise Subcommittee under the ALCC's Learning Systems Committee. This subcommittee worked to identify and build a library management platform capable of digitally linking the libraries of TRADOC's thirteen centers of excellence.

As the subcommittee has moved the initiative forward, it has encountered a number of challenges. Primarily, it discovered that the knowledge and skills necessary to effect this change are not readily available to all libraries. The scarcity of this necessary human resource will require close engagement by Army University's Library Enterprise Division staff to provide technical support. The need to develop multiple communication channels to support a robust exchange of knowledge and information also needs to be addressed.

As a network of individual networks, the Library Enterprise Subcommittee is better able to handle these unforeseen shortfalls by capitalizing on the training, education, and experience of their members instead of attempting to resolve these issues

from a single frame of reference. Additionally, each member is aware of the effort and remains vigilant in identifying shortfalls and stumbling blocks early on to minimize the impact to implementation.

Another benefit to a robust network is the realization of yet unknown possibilities to further capitalize on the effort. For example, as this initiative moved forward, discussions were held with Installation Management Command regarding the possibility of integrating post libraries. While not thought of initially, combining libraries is now under consideration, demonstrating once again the power of networks.

Lateral processes. Lateral processes cross major organizational divisions and may also occur naturally. In business, lateral processes consider such things as a new product design and involve employees from across the company.²⁶ In the Army, the fielding of new information systems, as early as 2020, will impact soldiers across at least two major commands, the U.S. Army Forces Command and TRADOC. In the future, a single system could combine the functionality of multiple existing stand-alone training systems currently in use throughout the Army.

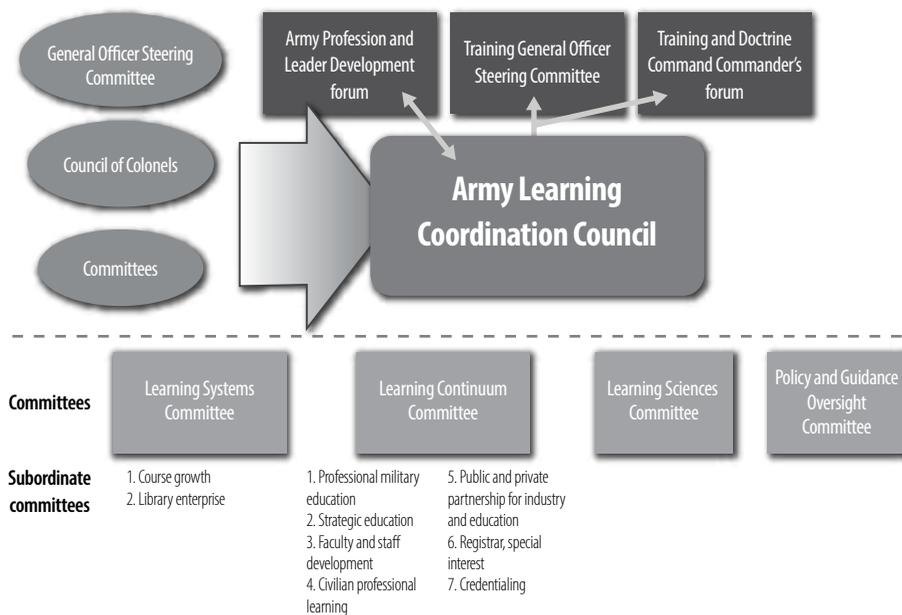
Given the breadth of this fielding across the Army, using the ALCC as a lateral process aids implementation by serving as a means to inform all stakeholders to include both soldiers and civilian employees. Whenever change is required internally or externally, organizations best position themselves to achieve a positive outcome when employees are informed, involved, and motivated to positively impact the transition.²⁷ The ALCC assists the fielding of new information systems through communication, education, and the broadcasting of goals and objectives.²⁸

The Army's vision in establishing an overall enterprise system accomplishes three tasks. The first is to close identified training system gaps. The second is to comply with the Department of Defense's data-sharing policy. Finally, the third is to reduce the Army training systems functional duplication and access points.

To achieve these tasks, the Army established the Requirements Control Board to discover, reduce, and eliminate redundant, obsolete, and unfinanced capabilities. Given the membership of the Requirements Control Board, it can also be considered a lateral process in bringing together the users of systems with the developers of systems.²⁹

At a previous meeting of the ALCC, however, it became apparent that the centers and schools were not all aware of potential fielding of new information systems. While any future system has equities in both Forces Command and TRADOC, the capabilities under development were not universally known to the senior leaders at the centers and schools. As a result, the ALCC coordinated with various system stakeholders with the goal of integrating the information systems planners and technicians with the faculty and staff to successfully achieve all three enterprise tasks.

As an outcome of this nascent lateral process, the Army University registrar and chief of the Registrar, Special Interests Subcommittee attended a coordination meeting at Fort Eustis, Virginia, in the spring of 2018. During that meeting, the registrar worked with other stakeholders to design a prototype event intended to mitigate the



(Figure by Vince Carlisle)

Figure 1. The Army Learning Coordination Council (ALCC) Committee Structure

risk of data migration between systems through research, data analytics, and gap analysis. That meeting should aid in the reduction of transactional and recording errors and inconsistencies in data across the learning system in support of eventual fielding of new information systems. This risk mitigation effort is intended to become a cost-savings approach; it will prepare data and yield analytics for integration, and it is expected to result in a prioritization of capabilities based upon learning needs within the Army. The Registrar, Special Interests Subcommittee efforts are expected to result in the capability to access all Army courses through a centralized hub, including other supportive information technology, thereby improving readiness and the reporting of leadership development and capabilities across the Army.

Teams. While networks and lateral processes can naturally occur in an organization, the other three lateral capabilities are elective, meaning members can be assigned based on knowledge, skills, roles, and responsibilities.³⁰ In the case of the lateral capability of teams, these teams are designed to cross functional lines. Members of lateral capability teams maintain their relationships in their division as well as those they build on the team.³¹ In the case of the ALCC, the committees serve as the learning enterprise's lateral capability teams (see figure 1).

Each of the ALCC committees has a unique role in Army University with respect to the development of the learning enterprise. The roles, while unique, are not exclusive and, in fact, the efforts of one committee can influence the initiatives of another. For example, the Learning Systems Committee's library enterprise initiative, once realized, will have a positive impact on the committee's development of research within the learning enterprise. The policies proliferated through the Policy and Governance Committee will likely impact the Learning Systems Committee's efforts regarding course growth and may also have an impact on the Learning Continuum Committee's registrar initiative.

The initiatives of the ALCC committees come from Army University's charter and the CAC commander's annual guidance, and they can be generated internally based on gap analysis. The committees' initiatives span the learning enterprise, and they are future oriented and complex. In the case of the registrar initiative, for example, each school has an independent registrar system. Some are software based, others are not. Each school conducts their registrar functions with autonomy. While the initiatives of the committees are complex, the desired outcome moves a committee into action—in this case, a registrar-certified transcript covering the career of a soldier. The committee initiatives drive the efforts of the committee members and compel the team. A compelling direction inspires the team to move forward and is shown to be one of three elements capable of enabling a diverse and geographically dispersed team to function as a high performing team. The two other elements are strong structure and supportive context.³²

While each ALCC committee has a compelling direction, they also have a strong structure. In the case of the Policy and Governance Oversight Committee (PGOC), the members represent each stakeholder across the learning enterprise. These representatives include members of the centers and schools, TRADOC divisions, and Headquarters, Department of the Army (HQDA). The PGOC has specified tasks and processes, and is responsible for the continuous improvement of the learning policy process. While large teams are more susceptible to poor communication, the PGOC maintains a web presence called the Training and Education Developer Toolbox and has a published agenda for their formal monthly meetings.³³

The third element of high performing teams is a supportive context. The efforts taken to ensure good team communication are the recommended means of establishing a supportive team context, while providing training is another means of creating a supportive team context.³⁴ The PGOC typically highlights a best practice from a center or school at its monthly meetings. During one meeting, it introduced the members to the new academic efficiency report and brought in a subject-matter expert to answer questions. Each time the PGOC added an element of training to its meeting, the PGOC chair received emails and phone calls lauding the effort.

Integrative roles. Integrative roles are the second elective lateral capability and are formal positions. The persons who fill these positions have the responsibility to

share information across the structure.³⁵ In the case of the ALCC, members of the Council of Colonels (CoC) and the General Officer Steering Committee (GOSC) perform this integration effort. The learning enterprise centers on TRADOC's centers of excellence, schools, and proponent offices, which function as open systems. While they are delineated by their physical environment, they are influenced by a larger environment acting upon them.³⁶ The environment acts upon the centers, schools, and proponent offices through new technology and orders from TRADOC and HQDA. The learning enterprise centers are also influenced by the changes in doctrine, organizations, training, materiel, leadership and education, personnel, facilities, and policy. As the environment acts on the respective centers, schools, and proponent offices, problems crossing center, school, or proponent office boundaries can then be addressed by the ALCC committees.

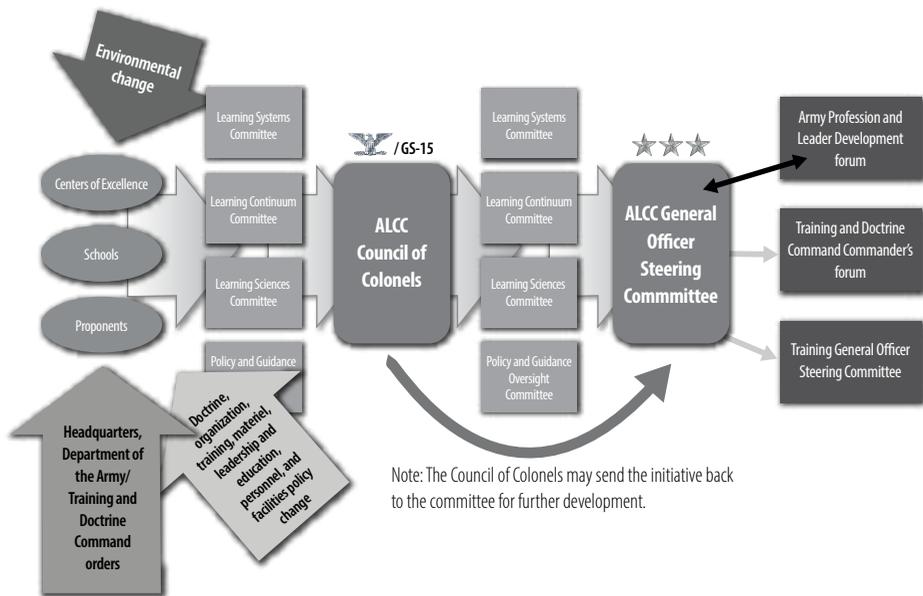
These committees bring the power of lateral capability of teams in developing and implementing solutions. They submit their proposals to the CoC for approval, and the CoC, acting in their integrative capacity, ensure the proposed solutions are adequately developed to ensure successful implementation. The CoC meets once per quarter and can either recommend a committee initiative be sent to the GOSC for approval or be sent back for further development.

Because of the CoC's pivotal role in the process, it is significant to note the composition of the ALCC's CoC. The primary membership is comprised of the directors of training (or equivalent) for each center and school. The CoC is cochaired by the TRADOC director for leader development and Army University's director for strategic policies and plans. In addition to the center and school directors of training, strategic staff section directors from the offices of the TRADOC deputy chief of staff for the G-1/4 (personnel and logistics) and the G-2 (intelligence) as well as from TRADOC's Quality Assurance Office sit on the ALCC's Council of Colonels. Members from the Combined Arms Center include the deputy chief of staff for the G-3/5/7 (operations, plans, and training), the G-8 (resource management), and the Army Reserve and National Guard.

The GOSC performs an additional integrative role by either approving the action for implementation or moving the action to a resource committee (see figure 2, page 119). In the case of the ALCC, the resource committees are the Army Profession Leader Development Forum, the TRADOC Commander's Forum, or the Training General Officer Steering Committee. In some cases, the GOSC may return an initiative to the committee for further development. The composition of the GOSC primarily consists of the center and schools commanders and commandants. The cochairs of the GOSC are the commanding general of CAC and the TRADOC deputy commanding general/chief of staff.

Transorganizational systems such as the ALCC have characteristics that can prove challenging, especially when change is considered continuous.³⁷ Hierarchy and structure are characteristic of Army organizations, and this hierarchy and structure

LEARNING COORDINATION COUNCIL



(Figure by Vince Carlisle)

Figure 2. How the Army Learning Coordination Council (ALCC) Works

cause member organizations to govern the conduct of their respective organizations without outside influence or assistance.³⁸ This has the potential to disaggregate the membership.³⁹ By increasing shared norms and values, as is accomplished in the ALCC committees, this disparity or independence of action can be overcome by enabling change.⁴⁰ In cases where members' interests conflict (e.g., ALCC leadership), acting in their integrative roles serves as a type of network choreographer.⁴¹ The structure of the ALCC itself appears to enable a process of continuous change as regards the Army's complex learning enterprise.

Matrix structures. The third elective lateral capability is a matrix structure. The concept of matrix structures dates back more than fifty years as organization designers attempted to compensate for the shortfalls of the unit structure and the functional structure. One characteristic of a matrix structure is that it shares resources.⁴² It would be a stretch to consider that any part of the ALCC organization is a matrix structure, but what is interesting is that some of the issues worked by the ALCC appear to have matrix structure characteristics. As was the case with the lateral capability teams, matrix structures optimize performance when three conditions are present.⁴³

The first is a pressure to focus on multiple areas. This condition exists within the ALCC area of responsibility—course growth. The schools must balance their functional training with Army common-core subjects. Course growth must take

into account all components of the Army, both active and reserve. Course growth requests must take into account performance in the operational force and require cost-based assessments. These elements require a depth of knowledge and understanding that are characteristic of a matrix structure and likely represent a “shadow” matrix structure.⁴⁴

The second condition is that the work is especially complex or interdependent. The description above demonstrates the complexity of course growth. The interdependence of course growth is demonstrated by the following constraints, bearing on course growth decisions, within TRADOC. Course growth requests must demonstrate that a thorough search for trade space has been exhausted or, if one exists, the use of it does not result in cost savings. An example would be that if one school desires to grow a course by three days, another school could consolidate curriculum and save three days that could then be applied to the school seeking growth. This condition tends to reveal itself in centers with more than one school. In addition to trade space, a single-day course growth requires the approval of the reserve forces. This approval is required due to the increase in funding for reserve force salary while attending a course.

The sharing of resources is the third and final condition required to optimize a matrix structure. This condition has been demonstrated in the previous description regarding trade space among centers. Ultimately, all course growth comes from TRADOC’s allocated funding. This condition, however, is not fully realized due to the geographic dispersal of schools. Schools typically do not share classroom facilities, which is typical of civilian institutions of higher learning. Schools also do not share faculty in the form of faculty exchanges, although it is worthy to note that faculty exchanges are an element of the ALCC’s initiative to increase academic partnerships. Overall, however, it could be claimed that the ALCC, operating at full capacity, is itself a matrix structure as it dissolves the traditional hierarchical and functional structures.⁴⁵

Conclusion

The dissolving of traditional structures within a university setting should be considered a strategic accomplishment for any university and could potentially serve as an example for nonmilitary university systems (e.g., state university systems). Regarding the application of lateral capabilities in a global context, there are examples of where the principals and theories of organization design have applied in other countries around the world.⁴⁶ It may, therefore, be possible for university systems in other countries to employ an ALCC-like capability to achieve the same goal as Army University in connecting geographically dispersed educational institutions into a more integrated educational structure.⁴⁷

In this regard, the ALCC appears to have served as a proof of concept, demonstrating the organization design principle of employing lateral capabilities to achieve efficiencies, increase innovation, and overcome organizational barriers.⁴⁸

The accomplishments of the ALCC already include a comprehensive instructor course and recognition program, an overhaul of the Warrant Officer Education System and Noncommissioned Officer Professional Development System, and a consolidation of hundreds of discrete general learning outcomes into just over a dozen. In the near future, the Army should realize a library enterprise system, begin fielding the Army Training Information Management system, and embark on proof of principal for an Army University-wide registrar system.

The future of the ALCC remains to be seen. However, if the research regarding organization design and associated lateral capabilities remain relevant within a military educational system, then the Army has achieved one of its goals in establishing Army University. ☞

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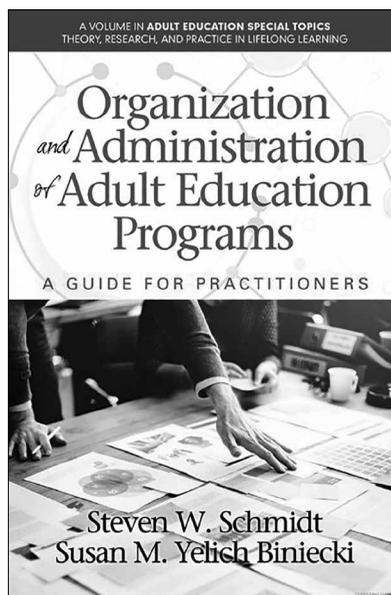
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Organization and Administration of Adult Education Programs

A Guide for Practitioners

Steven W. Schmidt and Susan M. Yelich Biniiecki,
Information Age Publishing, Charlotte,
North Carolina, 2016, 274 pages



Thinking about the field of adult education may bring up visions of classrooms with passionate teachers and enthusiastic adult learners. Before this vision is realized, other passionate activities occur, ones that are less romantic but equally important. A long-term plan is made for education. Funds are obtained to build infrastructure, learning systems, and maybe even brick-and-mortar buildings. Those buildings are staffed with the best possible educators, and the education content is kept current and relevant. Education must be affordable and easily found by the students who need it.

How does all this happen? Steven Schmidt and Susan Yelich Biniiecki have written a textbook to provide basic answers to the questions that come from the desire to be a professional administrator of adult education programs. For passionate teaching to happen requires program administrators who are working hard to create the conditions for adult education success.

In *Organization and Administration of Adult Education Programs: A Guide for Practitioners*, you will read about the confluence of business principles and processes with the leadership and administration of adult education programs. Schmidt and Yelich Biniiecki illustrate many basic principles of business with an eye toward the work of an adult education program administrator. They begin with the observation that many education programs grow organically as new elements are added and old ones drop off, usually without an organized plan. The authors recommend

factors to consider when thinking about how to organize a program, endorsing a rational development rather than the organic model. The authors provide information on possible ways an educational program can be set up to create greater efficiency (e.g., organizing around customers, geography, function, etc.).

Following the chapter on organization, Schmidt and Yelich Biniecki provide an interesting discussion about leadership and its symbiotic relationship with administration. They examine characteristics of both and point out some fundamental differences. Program administrators must balance working with people, resources, and processes. Schmidt and Yelich Biniecki provide many germane issues to consider in all three areas. It is never easy to solve business problems in this complex decision space that requires the skills of both leading and administration.

The issues addressed in the next five chapters are familiar to business persons, as each chapter highlights a common element of a successful business and relates it to adult education. Schmidt and Yelich Biniecki delve into the need for adult education program administrators to clearly understand budgeting, funding and support, marketing, human resources management, and strategic planning. The pertinent material in these chapters outlines the factors for success, in the business sense, for educational programs. For example, it may be unpleasant to engage in the process of budgeting, but Schmidt and Yelich Biniecki point out the positive features of having a clear budget. Budgets provide insight into the activities of the organization as well as into organizational priorities and goals so that all people involved can align their work with the overall direction of the organization.

The authors devote the final three chapters to practical instruction. There is material in two of the chapters concerning the need for evaluation of programs and the legal and ethical considerations for administrators. Both of those chapters are full of practical advice for administrators and can help them in decision making as they provide a step-by-step process for conducting a program evaluation together with examples of typical legal issues that may arise. The final chapter includes four scenario-driven exercises to illustrate the kinds of problems that administrators may face.

Organization and Administration of Adult Education Programs will be a helpful book for two audiences. If your desire is to advance your teaching career beyond the classroom and into administration, this book is a good primer to get started thinking about all that goes into the administration of adult education. If you plan to teach others about adult education and need a textbook to show students the relevant business aspects of educational administration, this will be a great book for you as well. ❧

Harold A. Laurence, PhD · Fort Leavenworth, Kansas

Army University Update

Faculty and Staff Learning Forum

14–16 August 2018

The Faculty and Staff Development Division (FSDD), Directorate of Academic Affairs, Army University (ArmyU), hosted a Faculty and Staff Development Learning Forum 14–16 August 2018 at the Lewis and Clark Center, Fort Leavenworth, Kansas. The purpose of the three-day working event was to allow Faculty and Staff Development (FSD) and quality assurance professionals throughout the Army Learning Enterprise (ALE) to share exemplars and experiences as a community of practice in support of the forum theme, “Collaboration for the Future.”

Brig. Gen. Scott L. Efflandt, provost of the Army University, provided opening remarks stressing the importance of training and education to prepare soldiers to meet the Army’s mission readiness objectives. Efflandt highlighted the “enduring commitment to education and training,” noting Secretary of Defense Mattis’ reference to their significance in the *National Defense Strategy*. He continued by threading the themes of the forum with other ArmyU initiatives that will have a long-term impact on faculty and staff throughout the Army.

FSD chiefs and professionals from ArmyU, Army schools, and centers of excellence (CoEs) facilitated a paper presentation, three roundtables, and five working groups to address key issues affecting soldiers and civilian stakeholders. Dr. David T. Culkin, FSDD, presented his paper entitled “Learner-centered Teaching in Army Faculty and Staff Development Programs.” The purpose of this case-study research was to examine how learner-centered teaching practices can help increase the efficacy of newly designed and implemented courses within the Common Faculty Development Program (CFDP) administered by ArmyU.

Roundtable discussions provided an opportunity for open discussion of a diverse range of topics. Dr. Kyle G. Smith of the Fires CoE presented his work, “School Leader as Educator.” Julie M. Kelley and Lt. Col. (Chaplain) Cloyd Layden of Installation Management Command presented “From Collaboration to Innovation Readiness,” sparked insightful debate on the role of innovation in Army classrooms. Joseph E. Vargo, FSD Chief at the Noncommissioned Officer Leadership Center of Excellence (NCOLCoE), facilitated an informative discussion on “Advanced Artificial Intelligence.” The roundtable discussions complemented the work group projects.

Work groups engaged in collective discussion to develop practical products addressing key faculty development issues common across the CoEs and schools.

Each group presented its findings during the plenary session at the end of day two. Colleagues and peers from across the ALE led the facilitation of each group. Work groups included the following:

- ◆ “Writing Assessment” was led by Joseph Vargo of NCOLCoE and cofacilitated by Ellen Bogdan and Dr. Harold Laurence from FSDD. This work group developed guidelines for assessing the quality of instructor-written communications while answering the key question, How can FSD professionals optimally assess the writing skills of their instructors? The work group presented the following products: (1) a general rubric to assess instructor writing (both formative and summative), (2) examples of success from the field, and (3) targeted skills for new instructors.
- ◆ “Faculty Development” was led by Rick Newton of the U.S. Army John F. Kennedy Special Warfare Center and School and cofacilitated by Dr. Charles Vance and Brandie Wempe from FSDD. This work group focused on the current trends and exemplars regarding the new Common Faculty Development–Instructor Course (CFD-IC) and Common Faculty Development–Developer Course (CFD-DC), discussed the Advanced Instructor Course, and identified “What’s missing.” Participants had an opportunity to provide feedback based upon their recent conduct of CFD courses. The work group presented: (1) an information paper that summarized key themes from the field concerning the implementation of CFD-IC/DC and made specific recommendations to improve the courses and CFD program, (2) examples of success from the field, and (3) a brief on the relationship of FSDD to local FSD and quality assurance offices.
- ◆ “Faculty Incentive Programs/Continuing Professional Development” was led by Trong Nguyen of TRADOC’s Career Program-32 office and cofacilitated by Tirdad Daei and Luis Duperon from FSDD. This work group refined draft policy regarding faculty collaboration and continuing professional development for the ALE. The work group presented the following products: (1) an information paper recapping key themes on the implementation of faculty incentive/development/collaboration programs with specific recommendations for implementation throughout the ALE, (2) examples of success from the field, and (3) suggested adjustments to the draft policy on FSD faculty collaboration and exchange.
- ◆ “What ArmyU Can Do for Schools and Centers of Excellence” was led by Suzanne Vaughan of the Aviation CoE and cofacilitated by Jack Rabon and Jarod Bernotski from FSDD. This work group identified opportunities to develop the relationships between FSDD and the quality assurance offices throughout the ALE. The work group presented the following products: (1) an abstract of key themes from the field concerning the gap analysis and specific recommendations to address those shortfalls throughout the ALE and (2) proposed changes to existing policy.

- ◆ “Feedback Mechanisms” was led by Dr. Sena Garven of the Institutional Research and Assessment Division, Directorate of Academic Affairs, and Dr. Culkin from FSDD. This work group refined draft policy for program evaluation for the ALE to establish a system for program validation. The work group presented the following products: (1) an information paper summarizing key themes on the implementation of a program evaluation system with specific suggestions for implementation throughout the enterprise, (2) examples of success from the field, and (3) suggested modifications to draft policy on FSD program evaluation.

A lively panel discussion highlighted the Learning Forum on day two. Notable guest panelists from academia involved in faculty development were Dr. Jana Fallin, director of the Teaching and Learning Center at Kansas State University; Dr. Regan Gurung, Ben J. and Joyce Rosenberg Professor of Human Development and Psychology at the University of Wisconsin-Green Bay and coauthor of *An Evidence-based Guide to College and University Teaching: Developing the Model Teacher*; and Dr. China Jenkins, executive director of the Teaching, Enrichment, Advising, and Mentoring Center for the College of Pharmacy and Health Sciences at Texas Southern University. The entire forum audience engaged in the discussion that focused on defining faculty development and learning how faculty development program initiatives are implemented at the panelists’ institutions.

Feedback from participants provided recommendations for new initiatives and items for consideration:

- ◆ Establish a common site for online collaboration and networking across the FSD community
- ◆ Retain focus on practical (e.g., work groups and outbriefs) versus academic activities (e.g., paper presentations)
- ◆ Continue to invite panelists who present and stimulate ensuing discussion relevant to the FSD participants
- ◆ Maintain an ArmyU organization overview brief emphasizing current and near-term objectives
- ◆ Consider making this an annual event
- ◆ The small groups facilitated collaboration

The legacy of the FSD Learning Forum will be measured by the degree of networks formed, in the clarity of the enterprise-wide problem statements and solution sets developed, and by continuing communication and collaboration. The continued collaboration will continue the focus of developing, sustaining, and promoting world-class faculty who can accomplish the following:

- ◆ Set an environment that develops critical thinking in adult learners and apply a wide spectrum of techniques that enhance critical thinking
- ◆ Manage adults in an adult learning environment

- ◆ Understand how adults are motivated to learn and possess the skills to inspire adults
- ◆ Communicate clearly
- ◆ Establish personal credibility (have something to offer) and authenticity (care about students)
- ◆ Challenge adult learners and provide required support for their success
- ◆ Engage in the process of continuous improvement as a faculty member

The next FSD Learning Forum is planned for summer 2020, alternating with the biennial Army University Symposium. As a result of this forum, FSD professionals throughout the Army now have better reason than ever to collaborate for future success. ☞

Upcoming Conferences of Note

October 2–5, 2018: American Association for Adult and Continuing Education

Myrtle Beach, South Carolina · <http://www.aaace.org/page/2018SOE>

The American Association for Adult and Continuing Education's (AAACE's) annual conference is one of the nation's largest forums dedicated to adult and continuing education. AAACE is the publisher of three leading adult education journals, including the *Adult Education Quarterly*, *Adult Learning*, and the *Journal of Transformative Education*.

October 8–10, 2018: Association of the United States Army Annual Meeting & Exposition

Washington D.C. · <http://ausameetings.org/2018annualmeeting/>

The Association of the United States Army's (AUSA) annual meeting is the largest landpower exposition and professional development forum in North America. The annual meeting is designed to deliver the Army's message by highlighting the capabilities of Army organizations and presenting a wide range of industry products and services. AUSA accomplishes this task throughout the entire event by providing informative and relevant presentations on the state of the Army, panel discussions and seminars on pertinent military and national security subjects, and a variety of valuable networking events available to all that attend.

April 5–9, 2019: Higher Learning Commission Conference

Chicago, Illinois · <https://www.hlcommission.org/Programs-Events/conference.html>

The theme of the 2019 Higher Learning Commission Conference is "Roadmaps for Student Success." The conference will provide forums for discussion of innovative programming and support services that meet students where they are and help them achieve success.

August 8–11, 2019: American Psychological Association Convention

Chicago, Illinois · www.apa.org

The American Psychological Association is the leading scientific and professional organization representing psychology in the United States, with more than 115,700 researchers, educators, clinicians, consultants, and students as its members.

Author Submission Guidelines

Manuscripts should contain between 3,500 to 5,000 words in the body text. Submissions should be in Microsoft Word, double-spaced in Courier New, 12-point font.

Manuscripts will use editorial style outlined in *The Publication Manual of the American Psychological Association*, sixth edition. References must be manually typed. (The automatically generated references employed by Microsoft Word have proven to be extremely problematic during conversion into final layout format for publication, causing delays and additional rekeying of material.) Manuscripts that arrive with automated references will be returned to the authors for compliance with endnote submission requirements. Bibliographies will not be used and should not be submitted with manuscripts.

Submissions must include a one-paragraph abstract and a biography not to exceed 175 words in length for each author. Such biographies might include significant positions or assignments, notes on civilian and military education together with degrees attained, and brief allusions to other qualifications that establish the bona fides of the author with regard to the subject discussed in the article. Do not submit manuscripts that have been published elsewhere or are under consideration for publication elsewhere.

Authors are encouraged to supply relevant artwork with their work (e.g., maps, charts, tables, and figures that support the major points of the manuscript.

Illustrations may be submitted in the following formats: PowerPoint, Adobe Illustrator, SVG, EPS, PDF, PNG, JPEG, or TIFF. The author must specify the origin of any supporting material to be used and must obtain and submit with the article permission in writing authorizing use of copyrighted material.

Photo imagery is discouraged, but will be considered if it is germane to the article. Authors wanting to submit original photographs need to do so in JPEG format with a resolution of 300 DPI or higher. Each submitted photo must be accompanied by a caption identifying the date it was taken, the location, any unit or personnel in the photo, a description of the action, and a photo credit specifying who took the photo. Captions should generally be between 25 and 50 words.

The *Journal of Military Learning* (*JML*) will not consider for publication a manuscript failing to conform to the guidelines above.

The editors may suggest changes in the interest of clarity and economy of expression; such changes will be made in consultation with the author. The editors are the final arbiters of usage, grammar, style, and length of article.

As a U.S. government publication, the *JML* does not have copyright protection; published articles become public domain. As a result, other publications both in and out of the military have the prerogative of republishing manuscripts published in the *JML*. ❧

Call for Papers

The *Journal of Military Learning (JML)* is a peer-reviewed semiannual publication that supports efforts to improve education and training for the U.S. Army and the overall Profession of Arms.

We continuously accept manuscripts for subsequent editions with editorial board evaluations held in April and October. The *JML* invites practitioners, researchers, academics, and military professionals to submit manuscripts that address the issues and challenges of adult education and training, such as education technology, adult learning models and theory, distance learning, training development, and other subjects relevant to the field. Submissions related to competency-based learning will be given special consideration.

Submissions should be between 3,500 and 5,000 words and supported by research, evident through the citation of

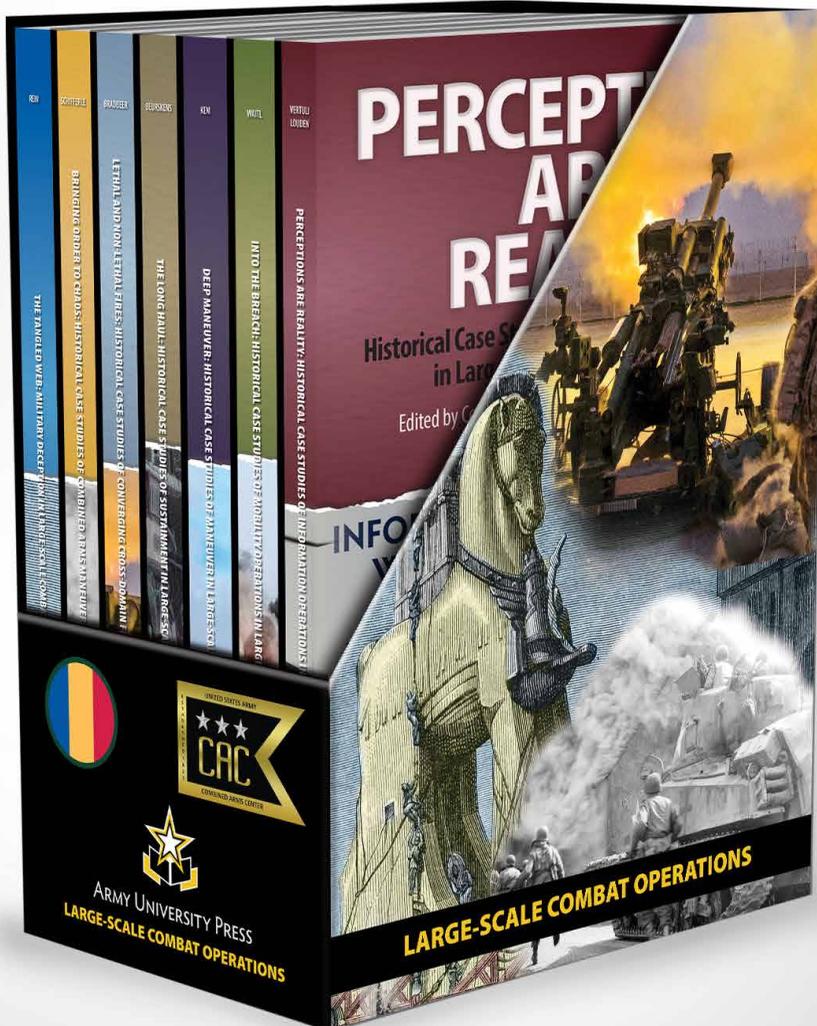
sources. Scholarship must conform to commonly accepted research standards such as described in *The Publication Manual of the American Psychological Association*, 6th edition.

Do you have a “best practice” to share on how to optimize learning outcomes for military learners? Please submit a one- to two-page summary of the practice to share with the military learning enterprise. Book reviews of published relevant works are also encouraged. Reviews should be between 500 to 800 words and provide a concise evaluation of the book.

Manuscripts should be submitted to usarmy.leavenworth.tradoc.mbx.journal-of-military-learning@mail.mil by 1 April and 1 October for the October and April editions respectively. See previous page for detailed author submission guidelines. For additional information call 913-684-9331 or send an email to the address above. ✉

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