Professional Military Education Proven in Combat during the Mexican War

Capt. Patrick Naughton, U.S. Army Reserve

rofessional military education (PME) is a critically important part of building effective military leaders. This fact is sometimes overlooked due to the misguided belief that experience and field service alone will make the best leader. While these items are significant, when combined with PME, they make a more potent recipe for a truly well-rounded military leader. Ultimately, the decisive test of the success of PME is its relevance and application in combat situations.

The Mexican War (1846–1848) occurred in an often-neglected period in America's history. It is mainly remembered and studied by historians for the insight it gives into the early military careers of many famous American Civil War officers on both sides of the conflict. What is not as readily realized is that it served as the validation and true starting point for the further development and implementation of PME for America's armed forces.

History of Early American Professional Military Education

No program of formal military education was established by America upon its independence from Great Britain. Officers were generally selected from the higher echelons of society, and they received their commissions through family connections or purchase.¹

This lack of a proper PME program to educate newly commissioned officers was not due to negligence. Many Americans feared the rise of an aristocratic officer class as seen in Europe and were hesitant to implement anything to encourage such a rise. However, then Gen. George Washington adamantly believed in a formal education system for new officers as long as it was appropriately managed. Numerous times, in person and in writing, he declared his desire for the establishment of a formal PME program for the country:

A military academy instituted on proper principles, would serve to secure to our country, though within a narrow sphere, a solid fund of military information which would always be ready for national emergencies, and would facilitate the diffusion of military knowledge as those emergencies might require.²

The establishment of an American PME program began as early as 1795 at a military garrison called West Point, New York. From 1795 to 1797, a military school was established there to educate artillery and engineer officers. Taught by three French officers, the school was short-lived because of funding problems, internal and external tensions due to the foreign instructors, and the competing need for officers on the frontier.³

Though the formal school was no more, West Point remained an Army garrison. Between 1797 and 1802, pressure from a number of American officers and politicians for the establishment of a permanent military academy grew. On 16 March 1802, the U.S. Military Academy at West Point (commonly known as West Point) was formally established when Congress authorized the president to organize and establish a school for the Corps of Engineers. West Point underwent a



number of changes, reorganizations, and expansions to other branches until the formal establishment of a true curriculum in 1817.⁴

Curriculum at West Point

All West Point officers who fought in the Mexican War (hereafter, referred to as the MW) were educated and disciplined under the same basic PME guidelines. This was mainly due to the superintendent who served from 1817 to 1833, Col. Sylvanus Thayer.

From its founding in 1802 until 1817, West Point had no formal curriculum or examination system. However, upon assuming his position as superintendent, Thayer, then a major, quickly implemented a structure broken down by battalions, classes, and subclasses, all dominated by areas of study. In a letter to Secretary of War George Graham, Thayer informed him, "on assuming command I lost no time in calling a meeting of the Academic Staff with a view to a new arrangement of the studies and to the classification of the cadets." He goes on to say, "Each professor or other

Battle of Cerro Gordo (1847), hand-colored lithograph, E. B. and E. C. Kellogg, New York and Hartford. The engagement was a key battle in a campaign that aimed at capturing Mexico City, the capital of Mexico. Many junior officers of the U.S. force participating in the battle would later gain prominence as senior commanders in the U.S. Civil War; among these, Capt. Robert E. Lee. (Image courtesy of Wikimedia Commons)

head of a Department is charged to draw up a programma [sic] specifying in minute detail all that is to be taught in his Course." He closed the letter with a note that the end goal of this project was to be a complete four-year study plan, which would be submitted to the War Department for approval.⁵

A set curriculum with an examination system was quickly established, and it became the norm. Thayer also implemented weekly progress reports and a system of measuring merit and class standing among all cadets.⁶ In this system, cadets received marks from 0.0 (poorest) to 3.0 (greatest) for all classroom and most practical work. These scores represented how proficient a cadet was in

a particular subject. Additionally, each subject was assigned a specific weight relating to its importance in the overall scheme of the curriculum. A cadet's daily score in a specific topic was calculated and then aligned with the weight of the importance of the overall subject. These two scores would be calculated and combined with a demerit system of rewards and punishments to determine a cadet's standing among his peers.⁷ Table 1 lists the weight assigned against the curriculum that all West Point officers would have been subjected to in the period leading up to the MW.⁸

The Onset of the War

Hostilities between Mexico and the United States had been brewing for years. The catalyst that initiated actual armed conflict between the two nations stemmed, in general, from border disputes over the annexation of Texas and the American belief at the time in "manifest destiny."

In 1845, the U.S. Army was wholly unprepared to go to war. The entire Army consisted of fourteen regiments (two dragoon, four artillery, and eight infantry) with a total authorized enlisted strength of 7,883.¹⁰ About three-fourths of the officers on the line were graduates of West Point, though none were general officers. During the MW, 523 West Point graduates served in the Regular Army. The volunteer forces initially had thirty-six graduates from the academy, but more would be assigned. By the end of the war, forty-nine would be killed, ninety-two wounded, and 447 brevet promotions would be awarded for bravery.¹¹

The Army's training was superb, focusing on small-unit, tactical-level field exercises rather than garrison parade-field pomp. 12 However, ironically, the primary weakness of the Army at this time was also its focus on small-unit tactics. Operations against guerrilla-style attacks in the first two Seminole Wars and other conflicts with Native Americans, the Army's small size, and its geographical dispersion across the United States precluded its forces from practicing massive unit engagements and tactics of the type necessary for large-scale conventional war. 13 To help mitigate this, the study of large movements of forces in past conflicts became a standard component of the West Point curriculum, and a large-scale

Table 1. Weight of Subjects in West Point's Curriculum before the Mexican War

Subject	Weight assigned in 1820	Weight assigned in 1840		
Engineering	2.0	3.0		
Natural Philosophy	2.0	3.0		
Mathematics	2.0	3.0		
Drawing	1.0	1.0		
French	0.5	1.0		
Chemistry		2.0		
Mineralogy and geology		2.0		
Tactics: - Infantry - Artillery - Cavalry	1.0 1.0 1.0	1.5 1.5 		
Conduct	1.0			
English: - Ethics - Geography - History - English - Rhetoric - Ethics - Law - Logic - Law - Grammar	1.0 1.0 1.0 	 2.0 2.0 		
Ordnance				
Gunnery				
Spanish				
Practical engineering				
Military efficiency				
Military deportment				

(Graphic by author)

organization mindset was introduced to cadets from the first year by structuring the curriculum based on battalion rather than company level.¹⁴

Additionally, the study of artillery was emphasized at West Point, which proved crucial during the MW. Even before the reorganization of the curriculum in 1817, Thayer wrote to the secretary of war and the head of the Corps of Engineers requesting the addition

of several officers to the West Point staff. This request included a call for an artillery officer "to take charge of the Material of that arm, to Superintend [sic] the artillery drills, The Laboratory, the practice at the cannon, howitzer, & mortar & teach the nomenclature of the pieces." Thayer called these officers "indispensable to the prosperity of this institution." 16

The schoolhouse preparation for use of artillery proved indispensable as American forces during the MW often faced a fortified and numerically superior enemy where artillery played a critical role. Maj. Samuel Ringgold, a West Point graduate killed during the Battle of Palo Alto, is credited for his innovative efforts in light artillery, focusing on rapid deployment and maneuverability. This technique became known as "flying artillery"; it became one of the building blocks of the branch and is still integral to indirect-fire employment.¹⁷

Historian and West Point graduate Edward Mansfield, writing about the Battle of Palo Alto in his published MW history, states, "Never was there a more complete demonstration of the superior skill of that arm of the service [artillery] as conducted by the accomplished graduates of West Point." 18

Engineering and the ability to effectively scout out enemy defensive works were other skills taught at West Point. Thayer, being an engineer officer, understood the importance of this branch of study. In an 1817 letter, he informed the secretary of war of his plan for instruction in this field: "We have transferred Engineering and the branches connected from the 3d to the 4th Years course because it was found that one year (of which only 9 months are devoted to study) is not sufficient for the instruction of that branch." ¹⁹

Thorough reconnaissance conducted by engineers trained at West Point repeatedly proved crucial during the MW. Gen. Winfield Scott, commanding general during the war, wrote numerous after-action reports that are filled with references to future American Civil War officers, and it contains by-name praise for numerous West Point graduates and their abilities as engineers. ²⁰ His report from the Battle of Cerro Gordo demonstrates this:

The style of execution which I had the pleasure to witness was most brilliant and decisive ... I am compelled to make special mention of the services of Capt. R. E. Lee, Engineers. This officer greatly distinguished himself at the siege

of Vera Cruz, was again indefatigable during these operations, in reconnaissance as daring as laborious, and of the utmost value.²¹

This effective combination of engineers and artillery officers trained via their PME experience at West Point was repeatedly observed throughout the conflict. Gen. Cadmus Wilcox, MW veteran and West Point graduate, also makes this observation. In his history of the MW he states,

The capture of Vera Cruz was an affair, in the main, of the staff and artillery. The engineers located and constructed the batteries with such good judgment and care, that there were few casualties; the fixed ammunition used by the artillery was prepared under the direction of ordnance officers with a skill ensured by their education and their experiments and labors in the laboratory.²²

The performance of these officers in the MW is graphically illustrated by examining the weights assigned against certain subjects in West Point's curriculum. The information in table 2 (page 88) illustrates the reasons behind these officers' successes in several areas.²³ In addition, by adding the 1860 data, the influence of the MW on the importance of certain subjects in the curriculum is apparent.

The areas highlighted in table 2 reveal why West Point officers were proficient in certain areas. Just before the MW, engineering, natural philosophy (the precursor to modern science).

and mathematics were weighted heavily, translating to success on the battlefield (highlighted in green). These areas remained important in the 1860 curriculum, and the importance placed on practical engineering increased as well. The criticality of artillery and ordnance was also realized in the MW, resulting in gunnery and ordnance topics being weighted more heavily in 1860 (green highlight).

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Interestingly, infantry, artillery, and cavalry (highlighted in yellow) lost their weight in 1860. This may be due to the realization that the Army was adept at small-unit tactics, and it needed more operational and strategic topics.

Also demonstrated in table 2 is the rise in importance of military efficiency, military deportment, and overall areas in English (highlighted in blue). This would serve to create an officer better poised to exercise critical thinking on a larger scale.

The analysis above overlooks the importance of the sum of all of the topics in the successful education of West Point officers and what they were able to bring to the fight during the MW. For example, drawing proved critical in mapmaking and reconnaissance. Essentially, all the topics in the curriculum were relevant, and they could be directly applied on the battlefield, which ultimately should be the goal of PME.

Commentaries on Performance of West Point Officers in the Mexican War

Gen. Scott, presenting a toast at a dinner party at the close of the MW, loudly and earnestly praised the academy. He declared, "This army, multiplied by four, could not have entered

the capital of Mexico" without the West Point-trained officers in his command. ²⁴ Later in life, when asked to provide input on PME at West Point, Scott wrote, "I give it as my fixed opinion that but for our graduated cadets the war between the United States and Mexico might, and probably would, have lasted some four or five years, with, in its first half, more defeats than victories to our share."²⁵

Table 2. Weight of Subjects in West Point's Curriculum before and after the Mexican War

Subject	Weight assigned in 1820	Weight assigned in 1840	Weight assigned in 1860
Engineering	2.0	3.0	3.0
Natural Philosophy	2.0	3.0	3.0
Mathematics	2.0	3.0	3.0
Drawing	1.0	1.0	1.0
French	0.5	1.0	1.0
Chemistry		2.0	1.5
Mineralogy and geology		2.0	1.0
Tactics: - Infantry - Artillery - Cavalry	1.0 1.0 1.0	1.5 1.5 	
Conduct	1.0		
English: - Ethics - Geography - History - English - Rhetoric - Ethics - Law - Logic - Law - Grammar	 1.0 1.0 	 2.0 2.0 	0.5 0.5 0.5 0.5 1.5 1.0 1.0
Ordnance			1.0
Gunnery			1.0
Spanish			1.0
Practical engineering			1.0
Military efficiency			1.0
Military deportment			1.0

(Graphic by author)

In December 1848, Secretary of War Randolph B. Marcy declared, "Among the considerations which render the U.S. Military Academy at West Point an appropriate depository of the trophies of the successful victories of our arms in Mexico is the admitted fact that the graduates of that institution contributed in an eminent degree to our unexampled career of success." Historian Edward Deering Mansfield concluded his

1849 history of the MW saying, "To this institution, more than to any state, or any arm of the service, or any exertion of valor, is the country indebted for the success and brilliant achievements of the war."²⁷

In 1860. shortly before the American Civil War. Gen. Joseph K. Mansfield, inspector general of the Army and MW veteran, was charged to examine and report on the academy. His conclusion of the validity of its PME drew directly from the MW: "I have only to cite the career of our Army in the Mexican War ... I make no hesitation in the assertion that there was no failure in the undertaking of any military operation or expedition during the war resulting from a want of education in the graduate."28

Mansfield's conclusion would be further supported

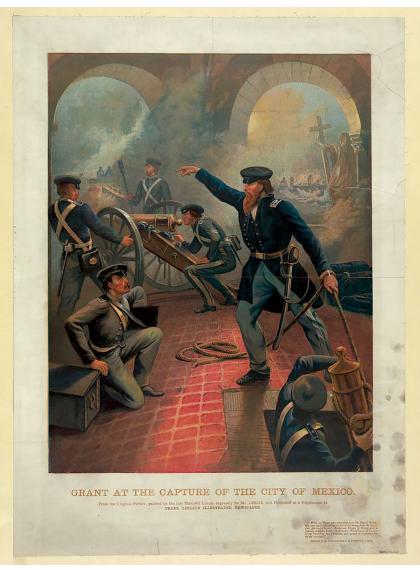
after West Point graduates performed exceptionally on both sides of the American Civil War. Gen. Ulysses S. Grant, West Point graduate and future president, credited West Point for his success in the American Civil War. Grant pointed to the personal relationships that he made during his time at the academy as being crucial to his success while in command: "The acquaintance thus formed was of immense service to me

in the war of the rebellion."²⁹

Grant's published memoirs contain forty-five references to how his connections to, and knowledge of, other West Point alumni assisted him throughout his life, both on and off the battlefield. As such, networking is another key benefit of PME. Those relationships formed among attendees serve to enhance careers by extending influences beyond the chain of command. The memoirs of Gen. Robert E. Lee, West Point graduate and former superintendent, read similarly and further expound on the importance of this networking process.30

Varina Davis, wife to West

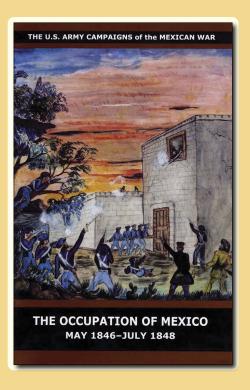
Point graduate and Confederate President Jefferson Davis, also supported this claim. She wrote in his memoirs, "During all his life he remembered his old companions at West Point and wrote many loving words."³¹



Grant at the Capture of the City of Mexico (1860–1870), painting, by Emanuel Leutze (artist) and printed in Frank Leslie's Illustrated Newspaper. The painting depicts future Union general Capt. Ulysses S. Grant leading a contingent of U.S. soldiers to position a cannon inside a church tower that targeted the San Cosme Gate leading into Mexico City during the final battle to capture the capital. Fire from the cannon helped clear the way for Maj. Gen. William J. Worth's 1st Division to enter the city. Lt. George E. Pickett and Maj. James Longstreet (future Confederate States' generals) also participated in the battle. (Image courtesy of Wikimedia Commons)

Military Review

WE RECOMMEND



The U.S. Army Campaigns of the Mexican War: The Occupation of Mexico

May 1846-July 1848

By Stephen A. Carney

he Mexican War is an often underappreciated event in the history of the United States that dramatically shaped its social and political character. During eighteen months of fighting, the U.S. Army won a series of decisive battles, culminating in the defeat of the Mexican Army and seizure of Mexico City. At termination, the conflict had added approximately one million square miles of land to the United States, including the important deep-water ports of coastal California. Moreover, it gave the Regular Army experience in large-scale conventional operations that later was applied on a much grander scale by both sides of the American Civil War. To view an online copy of this book, visit http://www.history.army.mil/html/books/073/73-3/CMH_Pub_73-3.pdf.

She went on to credit the taming of the western American frontier as being due to the refined education its young officers received at West Point, especially their ability to bring civilization to the wilderness.³² She stated that this experience silenced the critics of West Point and their shouts of "toy soldiers" and "shoulder-strap aristocracy" forever.³³

Davis put his pre-Civil War career in Congress on the line by vehemently defending West Point against proposed funding cuts or threats of closure numerous times.³⁴ In addition, as secretary of war, he proposed the academy's program be extended from four years to five, demonstrating how highly he regarded West Point.³⁵

Lessons Learned for Professional Military Education Today

The superb combat performance of West Point officers during the MW was due to PME combined with practical field experience. The curriculum taught in the classroom directly translated to a force multiplier on the battlefield.

Scott credited his West Point-trained officers for the rapidity of the execution and closure of the MW, and the value of their education is the major lesson from this conflict: the PME obtained by the cadets at West Point was crucial to the success of the Army in 1846 to 1848. This must be the goal of today's PME curriculum—to educate the Nation's soldiers on relevant topics that will translate to rapid and decisive victory on the battlefield.

Identifying gaps created by constrained funding which affects training dollars for large-scale field exercises, equipment, and supplies—is the second lesson learned from the MW. These gaps must be mitigated by PME. During the MW, it became clear that a fissure existed between training at the tactical level and at the operational and strategic levels of the Army due to budget constraints placed upon the force. However, this gap was in part mitigated by teaching operational and strategic concepts to future officers at West Point. This same identification process must be applied to current PME being offered to military leaders. If an operation cannot be executed in the field due to a lack of funding, then at the very least, the type of operation and its strategic purpose must be studied during PME.

Conclusion

West Point cannot claim to be the sole reason behind victory in the MW, as many of the untrained volunteer officers and noncommissioned officers performed valiantly and superbly. However, the success of the academy's graduates during that war demonstrates and validates the need for a useful and thoroughly applied PME program in a professional army. PME, combined with practical experience obtained through realistic field training events, will produce a better leader.

The challenge lies not in realizing the importance that PME plays in developing enlisted personnel and

officers who can win in future conflicts but rather in formulating a PME curriculum that anticipates what the future of conflict will look like. PME cannot take a "cookie-cutter" approach toward educating future leaders. It must remain flexible and constantly incorporate feedback from those serving in current engagements around the world.

A substantial investment in developing a robust and adaptive PME program rooted in continual reevaluation is crucial. This is the only way the force can mitigate budget constraints and keep Army leaders prepared to fight in future ever-changing and challenging conflicts.

Notes

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