

AIR WAR COLLEGE

AIR UNIVERSITY

HOW TO DEVELOP CRITICAL THINKING SKILLS WITHIN THE
ARMY'S OFFICER EDUCATION SYSTEM (OES) EARLIER IN AN
OFFICER'S CAREER

by

Joseph Blanding, COL, USA

A Research Report Submitted to the Faculty

In Partial Fulfillment of the Graduation Requirements

COL Barry G. Jones

13 February 2016

DISCLAIMER

The views expressed in this academic research paper are those of the author and do not reflect the official policy or position of the US government, the Department of Defense, or Air University. In accordance with Air Force Instruction 51-303, it is not copyrighted, but is the property of the United States government.



Biography

COL Joseph Dwayne Blanding is assigned to the Air War College, Air University, Maxwell AFB, AL. He graduated with a Bachelor of Arts Degree from Morris College in May 1994 as a Distinguished Military Student and commissioned as a Second Lieutenant in the U.S. Army's Transportation Corps. He holds the following degrees: Doctorate of Education, University of Missouri at Kansas City (UMKC); Masters of Science in Human Relations, The University of Oklahoma; Masters of Science in Education, Old Dominion University; and Masters of Science in Human Resource Management, Troy University. His military education includes the Intermediate Level Education Course, the Joint Planning Course, Combined Arms and Services Staff School (CAS3), the Combined Logistics Officer Advance Course, the Transportation Officer Basic Course, and the Support Operations Course Phase II.

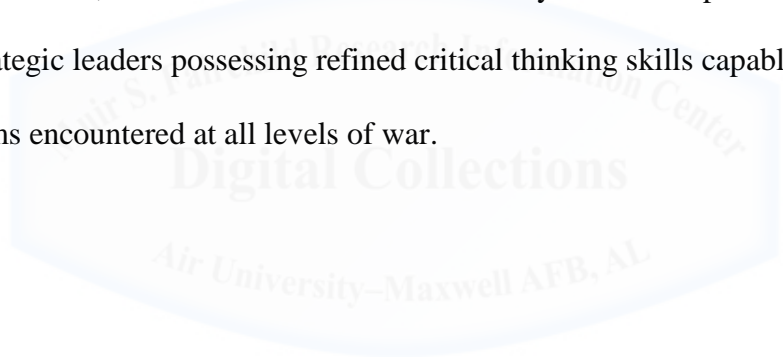
Colonel Blanding is a combat veteran of three foreign wars: Operation Iraqi Freedom, Operation New Dawn and Operation Enduring Freedom. He successfully commanded the 330th Transportation Battalion, Fort Bragg North Carolina, and later deployed its headquarters to Afghanistan coined as "Task Force Dragon's Heart."

Abstract

Critical thinking skills are required by strategic leaders to solve complex problems in an environment teeming with uncertainty as illustrated in the latest Quadrennial Defense Review (QDR). More often than not, strategic leaders do not foster those critical thinking skills until later in their military careers. Past chiefs of staff across the Department of Defense have expressed concern about the abilities of strategic leaders to manage multiple tasks simultaneously while meeting future demands. Often, early in one's career, junior leaders are limited with thinking critically due to their experience level, time span, and tapered curriculum of the Basic Course and Captain's Career Course (CCC). The curriculum at Command and General Staff Officer's Course (CGSOC) and the War College includes critical thinking. However, it is less than sufficient for collaring the complexity of the full-spectrum operating environment. Attendance at the CGSOC and the various War Colleges is restricted to the top percentage of officers. Thus, the development of critical thinking skills is necessary at the Basic Course and CCC since all officers will attend these schools. Investigation of the phenomenon indicates that the development of critical thinking skills is not a focus at the Basic Course or CCC.

As a result, the Army desires to explore how to refine the Officer Education System (OES) in order to enhance the critical thinking skills of the officer corps much earlier in their careers? To answer this question, a qualitative hermeneutic inquiry was conducted that focused on strategies to develop/improve critical thinking skills of officers at the Basic Course and CCC. Three conceptual strands guided this inquiry: 1) The Army's Officer Education System (OES); 2) Critical Thinking Skills; and the 3) Development of Critical Thinking Skills. Documents are the only source of data and content analysis was used to code the documents in order to provide meaning of the phenomenon under study.

Four major themes were revealed as a result of the process: 1) Creating a safe environment; 2) Factors associated with critical thinking; 3) Underprepared Teachers; and 4) Ineffective Instructional Practices. Six recommendations were formulated as a result of the findings: 1) Assign a complex problem to members of the Basic and Captain Career Course for solutions; 2) Provide an opportunity for officers to attend civilian classes focused on developing critical thinking skills; 3) Consider reculturing of the Army in order to facilitate critical thinking at all levels of war; 4) Implement research based strategies within this study at the Basic Course and CCC; 5) Implement teacher development to facilitate critical thinking skills; and 6) Conduct future research to assess the value of Critical Thinking courses at the Army's CGSOC and War College. If implemented, the recommendations of this study can have a positive effect on the likelihood of strategic leaders possessing refined critical thinking skills capable of solving complex problems encountered at all levels of war.



Introduction

Critical thinking skills are required by strategic leaders to solve complex problems. Stanlick and Strawser suggest that, “concept mapping for facts, theories, and argument construction is one of the ways in which reasonable approaches to complex and important moral issues are achieved.”¹ These complex problems appear in a byzantine world teeming with uncertainty which Gerras described as an environment marked by volatility, uncertainty, complexity, and ambiguity (VUCA).² The most recent Quadrennial Defense Review (QDR) strengthened this assertion declaring:

challenges to our many allies and partners around the globe remain dynamic and unpredictable, particularly from regimes in North Korea and Iran. Unrest and violence persists everywhere, creating a fertile environment for violent extremism and sectarian conflict, especially in fragile states, stretching from the Sahel to South Asia, and threatening U.S. citizens abroad.³

These threats illuminate the need for strategic leaders who are able to multi-task. Browning proclaims “strategic leaders must be able to negotiate, develop alternative solutions, enable others to act, manage conflict, and enhance the ability to persuade and influence others.”⁴ In order to ensure officers are able to do these tasks earlier within their careers, a refinement of the Officer Education System (OES) is necessary.

I’ve divided this research inquiry into four sections. The first section provides an overview of the thesis, the problem, the purpose of this study, and the literature review. The overarching question and sub question which defines the purpose of this inquiry is provided. The second section of this study centers on the theoretical framework, which as suggested by Maxwell, pivots on the “beliefs and assumptions of the researcher, concepts and theories, experiential knowledge, and existing literature.”⁵ The conceptual strands binding this study to theory are: 1) The Army’s OES; 2) Critical Thinking Skills; and the 3) Development of Critical

Thinking Skills. The tenets that support my line of reasoning are provided. The third section covers the methodology of this inquiry. The fourth section addresses the findings, conclusion, and recommendations. Future research opportunities exploring the phenomenon under study are provided. The next focus is on the problem as defined within this inquiry.

Thesis Statement

The line of reasoning for this study is simple. Strategic leaders are less likely to possess refined critical thinking skills because the Professional Military Education (PME) curriculum does not develop these skills to influence war planning and outcomes. This phenomenon is best illustrated within the current Basic and Captain Career Course's (CCC) curriculum, the Iraq War, and the Afghanistan War. Each year, the top percentage of military officers receive acceptance to either a War College or Command and General Staff Officer Course (CGSOC). Although the PME curriculum at the War Colleges and CGSOC address some critical thinking skills, additional research is required to determine the relevance for military officers.

Strategic leaders are expected to solve complex problems which require strategic thinking, specifically the ability to think critically. Critical thinking is one of three main components of strategic thinking. More often than not, leaders do not foster those critical thinking skills until later in their military careers. For many years, senior leaders of the Armed Forces demonstrated an inability to think strategically. To illustrate this point, Allen and Woods declared that, "...successive service chiefs of staff across the Department of Defense have lamented the lack of senior leaders who understand how to sustain the force of the day while preparing to meet the demands of the future."⁶ They also implied, "that senior military officers must be adept at advising their political masters on national policy, developing long range military strategy to support policy, and managing the defense enterprise."⁷

Early in one's career, junior leaders are limited with thinking critically due to their experience level, time span, and tapered curriculum of the Basic and CCC. Critical thinking skills must be fostered within our schoolhouse. According to General Dempsey, "We must place students into situations of uncertainty and complexity where creativity, adaptability, critical thinking and independent, rapid decision-making are essential elements."⁸ Many believe in order to think critically, one must possess substantial knowledge of the subject matter. Mason citing McPeak declared one must possess "substantial knowledge of a particular discipline before one can be capable of critical reasoning..."⁹ For the purpose of this inquiry, critical reasoning and reflective thinking are interchangeable with critical thinking. Junior officers are unable to develop the ability to think critically due to their rank and or experience level. The line of reasoning is junior officers should concentrate on obtaining technical and tactical abilities instead of questioning theory or ideas.

Ault supports this assertion claiming, "many will argue that a newly commissioned officer must learn his job [which] ...is to develop tactical and technical competence above all else."¹⁰ The Army's PME curriculum does not facilitate the development of critical thinking skills. This study centers on the Basic Course and CCC. Again, I use Ault to illustrate this point. Ault, in his monograph for the School of Advance Military Studies, critically scolds the Career Course and its privation for developing critical thinkers. Ault writes, "these and the other listed tasks [maintaining a disciplined command climate, administering the Uniform Code of Military Justice (UCMJ), and executing the unit's assigned mission] represent a clear focus on training to task rather than truly educating for life and critical reasoning."¹¹ As junior officers progress through the ranks, they are less likely to build upon those critical thinking skills required to tackle complex problems as described earlier within this inquiry.

Consequently, the strategic leader is less than prepared to properly execute his or her duties as expressed by frustrated past chiefs of staffs. The army officer education system does not concentrate on the development of critical thinking within an officer's career. Critical thinking skills are required of strategic leaders in order to solve complex problems routinely encountered at the strategic level of war. The Basic and Career Course curricula centers on training for tasks as opposed to critical reasoning to solve complex problems at all levels of war. The lack of critical thinking skills was evident in the Iraq and Afghanistan Wars which supports the need to begin the focus of critical reasoning much earlier in an officer's career.

The purpose of this inquiry was to explore the Army's OES and conclude its ability to develop critical thinking skills earlier in an officer's career. The overarching question is: How should the Army refine the OES to enhance critical thinking skills of officers much earlier in their careers? Two sub-questions were addressed:

- 1) How can the Army implement critical thinking within the Basic Course and CCC curriculum?
- 2) What support from leadership will be required in order to promote critical thinking at all levels of war?

This inquiry applies a qualitative approach to explore this phenomenon. Creswell defines qualitative research as the study of research problems inquiring into the meaning individuals and groups ascribe to a social or human problem.¹² The subsequent section outlines the literature that undergird the need for critical thinking skills followed by the methodology, discussion of findings, questions guiding this inquiry and recommendations for introducing critical thinking skills earlier in an officer's career.

Literature Review

Overview of the Army's Officer Education System (OES)

The PME is designed to address the educational needs of military officers and enlisted personnel. The majority of the services partitioned their Officer PME into the following schools: the Basic Course (Lieutenants), the Career Course (Captains), the Command and Staff School (Majors) and the War College (Lieutenant Colonels – Colonels) with each responsible for preparing the officer to assume his or her assigned role. In this section, an overview of the Army's OES is provided that suggest alteration to the Basic Course and CCC curriculum to develop and/or improve an officer's critical thinking skills. Later, these core curricula are explored in greater detail.

The United States Army provides basic education for Lieutenants of all functional branches. Lieutenants attend their specific basic school prior to arrival at a duty location. For example, Sustainers attend Fort Lee, Virginia for approximately sixteen weeks of training while Infantry officers attend the Infantry Basic Officer Leadership Course (IBOLC) at Fort Benning, Georgia. Upon promotion to Captain, officers attend CCC to prepare for company command and tactical planning responsibilities.

At the CGSOC, sister services routinely attend the course. The Army's CGSOC is located at Fort Leavenworth, Kansas and is reserved for officers in the rank of major. Lastly, the Army War College is located at Carlisle Barracks and is a ten month program. As stated previously, critical thinking is included into the curriculum at CGSOC and the War College. However, I theorize it is less than sufficient for collaring the complexity of the full-spectrum operating environment as noted by Straus, Shanley, Crowley, Yeung, Bana, and Leuschner.

Tilghman reinforces this idea stating, “Many military experts have criticized the Defense Department’s network of professional military education institutions. He also states that, “assignments at some schools were considered cushy posts that gave troops time to focus on family and networking at the expense of academic development.”¹³ Tilghman quoted Richard Kohn, a military history professor at the University of North Carolina at Chapel Hill who declared that, “the heart of the problem is that too many of our officers lack a rigorous college education... the better graduate programs are more rigorous than the war colleges and the staff colleges.”¹⁴ Straus et al. purport, “the complexity of the full-spectrum operating environment means the U.S. Army’s education system must increasingly foster adaptability and critical thinking skills.”¹⁵ Thus, I deem it important to examine the phenomenon of critical thinking skills.

Critical Thinking Skills

Paul and Elder define critical thinking as “the art of thinking about your thinking while you are thinking in order to make your thinking better: more clear, more accurate, or more defensible.”¹⁶ The lack of critical questioning and or critical thinking skills renders the military less prepared to deal with complex problems. I use the lack of a political strategy to deal with Saddam Hussein during the invasion to underscore this assertion. Bacevich, Diehl, Hayden, Laqueur, O’Sullivan, Perle, Rieff, and Wolfowitz claim that “for years before 9/11 made invasion our only option in Iraq, we failed to develop a political strategy for dealing with Hussein. And for years after Baghdad fell, we compounded that failure as occupiers.”¹⁷ Although the political strategy is a responsibility of our civilian leadership, our strategic military leaders/analysts should have identified the ambiguity and hounded our civilian leaders for

answers. This is a shortfall within planning; a lack of critical thinking and or questioning.

Clausewitz notes that,

when whole communities go to war – whole peoples, and especially civilized peoples – the reason always lies in some political situation, and the occasion is always due to some political object...that war is not merely an act of policy but a true political instrument, a continuation of political intercourse, carried on with other means.¹⁸

Hence, the political strategy should have been understood. Critical questioning or probing, a result of critical thinking, would have ensured a viable political strategy. Moore purported, “critical thinking involves asking critical questions that will lead to a sound conclusion, thus, resulting in a sound decision.”¹⁹ Critical questioning is an essential element of planning. Stanlick and Strawser citing the prominent philosopher John Dewey wrote, “thinking is inquiry, investigation, turning over, probing or delving into, so as to find something new or to see what is already known in a different light. In short, it is questioning.”²⁰ So why is the ability to think critically important?

Wallace and Jefferson purport, “the ability to think critically contributes to successful problem solving and decision making in all areas of life, including academic, professional, civic, and even interpersonal relationship.”²¹ Gul, Khan, Ahmed, Cassum, Saeed, and Yasmin declared, “CT is useful to analyze complex data, evaluate situations and actions, and implement the most appropriate actions.”²² Many believe critical thinking skills can be learned or developed. So, a discussion centered on research based strategies to develop critical thinking skills is warranted.

Many studies have been conducted on how to develop critical thinking skills. The research suggests that developing critical thinking skills should start at the elementary and secondary levels in schools across the country. Karabulut in his historical analysis study of 132 articles published between 1977 and 2006 of three major journals concluded that “the use of classroom discussions, writing activities, and questions should be utilized more in social studies

classrooms to promote critical-thinking.”²³ Wallace and Jefferson in 2015 conducted a study of 76 undergraduate students to examine the effectiveness of using exercises to develop critical thinking skills. Twenty-five of the seventy-six participants were allowed to use a Critical Thinking workbook “specifically designed to exercise and develop critical thinking skills.”²⁴ Wallace and Jefferson concluded that environments can be specifically designed to improve critical thinking skills and were successful in doing so.²⁵

According to Brookfield, two central activities must occur: identifying and challenging assumptions and exploring alternative ways of thinking and acting.²⁶ Brookfield describes an environment in which critical thinking thrives:

- 1) Diversity and divergence would be accepted, even encouraged, so that in problem-solving groups there would be no attempts to bring matters to some form of artificial resolution.
- 2) Flexibility of format and direction would be welcomed.
- 3) Risk taking and spontaneity would be valued.
- 4) Facilitators would model openness and critical analysis.
- 5) There would be no presumption that perfection is the chief characteristic of successful facilitation; and
- 6) There would be skepticism of final answers.²⁷

In addition to strategies for teaching critical thinking skills, instructional design programs are helpful to improve individual competence. Saiz, Rivas, and Olivares conducted a study of 144 first year Psychology Students attending the University of Salamanca in 2015. The study concluded that the instructional design program known as ARDESOS (Argumentation, Decision,

and Solving of problems in daily Situations) v.2 significantly improved the critical thinking skills of students.²⁸

Paul and Elder identified three obstacles to critical thinking within organizations: 1) The Covert Struggle for Power; 2) Group Definitions of Reality; and 3) The Problem of Bureaucracy. In regards to the struggle for power, the authors write, “high position in a hierarchy naturally leads others to yield. What is more, there is an incentive in most stratified groups for those with superior position to hold the view that their thinking is superior to those below them.”²⁹ To promote critical thinking, leaders must allow their subordinates to think without fear or intimidation. Paul and Elder recommend organizations must “take these realities into account to establish a culture of critical thinking.”³⁰ Bureaucracy is a major challenge within the military. The authors purport that “with bureaucracy, narrowness in thinking emerges.”³¹ Military leaders should minimize bureaucracy when possible in an attempt to facilitate creative thinking. Consequently, a reculturing of the military may be necessary in order to facilitate and promote critical thinking.

Next a discussion of the Basic Course and CCC’s curriculum and the Iraq and Afghanistan Wars is warranted. The basic and CCC courses do not focus on critical thinking skills which ultimately affect the leader’s ability to think critically at all levels of war as evident in the Iraq and Afghanistan wars.

Basic and CCC Curriculum

The Basic and Captain’s Career Course curriculum does not support the development of critical thinking skills. The Infantry Basic Officer Leadership Course illustrates this assertion.

(See Figure 1).

EVENT STANDARD	POINT VALUE
LEADERSHIP ASSESSMENT	
Leadership Assessment	100
Platoon Trainer Overall Performance and Potential Evaluation	50
TOTAL	150
COMPREHENSIVE EXAMINATIONS	
IBOLC Comprehensive Exam	100
Combined Arms Exams (CAID)	50
TOTAL	150
PHYSICAL FITNESS	
Record APFT	100
Five mile run	25
12 mile foot march	25
16 mile tactical foot march	GO/NO GO
TOTAL	150
TACTICAL	
Small Unit Operations Quiz	5
Operational Terms & Graphic Quiz	5
Troop Leading Procedure Exam	30
Defensive Operations Quiz	10
Urban Operations Quiz	10
Defense/Urban Operations Exam	30
COIN/Stability Operations Quiz	10
COIN/Stability Operations Exam	30
Reconnaissance and Security Quiz	10
Combined Arms Maneuver Exam	30
TOTAL	170
TECHNICAL	
Land navigation	40
Training Management Quiz	10
STX Lane Development PE	10
Tactical Communications Exam	30
Machine Gunnery Principles and Range Card	10
Equipment and Vehicle Identification Exam	30
Develop a Platoon Physical Training Plan	10
TOTAL	140
COMMUNICATION	
Effective Writing x 20 (20 points each)	40
Oral Operation order x 2 (100 points each)	200
TOTAL	240
TOTAL POINTS AVAILBALE	1000

Figure 1. *Points distribution table: Infantry Basic Officer Course (IBOLC) Graduation Requirements: 3 SEP 2013.*

After analyzing Figure 1, it is clear the IBOLC curriculum is focused on “training to task rather than truly educating for life and critical reasoning.”³² A similar conclusion can be obtained at the Field Artillery Captain Career Course (FACCC) located at Fort Sill Oklahoma. The Field Artillery School provides an overview of the Captain’s Career Course explaining,

Students receive instruction on leadership, mission command, training management, unified land operations and operations. The FA tactical and technical portion... consist of gunnery, fire support, FA battalion operations, battery command, and advanced fire support.³³

Obviously, critical thinking skills are not emphasized within the curriculum. Next, I deem it important to discuss the Iraq and Afghanistan wars illustrating the need for critical thinking skills.

Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF)

First and foremost, the military has performed magnificently during OIF and OEF. The military did everything it was asked to do and then some. Not appearing critical of the military, there have been many lessons learned. During this section of this inquiry, I will explore those lessons learned as viewed through the lens of military and civilian personnel and using these wars to illustrate the need for sophisticated critical thinking skills capable of solving complex problems. Two areas are the focal points of this discussion: insurgency and nation-building and understanding culture. I use OIF to discuss insurgency and nation-building and OEF to discuss the understanding of culture. The lessons learned apply to both operations and for future ones.

An insurgency was reasonable to assume at the conclusion of both wars. The lack of government and the inability to provide the basic needs such as sewage, electricity, and schools, is the formula for an insurgency. The military had anarchy on their hands with no plans of how to assist the Iraqis or the Afghans with some form of governance. Zinni and Koltz contended, “we had a plan for Iraq, but not a plan to reconstruct and win the peace...a military organization

that could defeat the enemy but not an organization could reconstruct society.”³⁴ Mockaitis strengthens this argument stating,

In November 2005, the White House published a National Strategy for Victory in Iraq, its first effort to articulate a comprehensive approach to countering the 2 1/2 –year-old insurgency. The long delay in drafting such a statement testifies to an inability or unwillingness to recognize the nature of the conflict during its initial phase.³⁵

It appeared to be a lack of critical thinking as noted by Zinni and Koltz, who declared that “...some of it comes from our failure to engage in basic strategic thinking.”³⁶ Mockaitis points out the, “lack of planning for an insurgency combined with the shortage of troops had immediate repercussions and long-term consequences.”³⁷ Reinforcing this, Record declared, “Making matters worse was the Bush administration’s manifest unpreparedness to deal with the state-building challenges it encountered in post-Baathist Iraq, most notably a surprise insurgency that has seemingly stalemated U.S. military power there.”³⁸ A lot of the responsibility lies with civilian leadership; however, the military does share some responsibility.

In an interview with 60 Minutes, Gen Zinni declares, “there has been poor strategic thinking in this ... there has been poor operational planning and execution on the ground.”³⁹ Opponents of the poor operational planning argument believe the military was not allowed to execute because of Rumsfeld and other civilians leaders and will align with General Zinni, who stated,

I blame the civilian leadership of the Pentagon directly. Because if they were given the responsibility, and if this was their war and by everything that I understand, they promoted it and pushed it – certain elements in there certainly – even to the point of creating their own intelligence to match their needs, then they should bear the responsibility.⁴⁰

It is well known that military leaders were concerned about troop levels and Rumsfeld directed a leaner force. However, if one values Gen Zinni’s latter assertion, one must give validity to the first assertion that there was a lack of planning at the operational level. Civilians are not

responsible for operational planning; military leaders are. During war, it's important to understand the culture of the people involved.

The military did not have a grasp of the realities of the culture of the Afghan or Iraqi people. A Chinese analyst provided four weaknesses in American strategic culture one of which being "a lack of understanding about the history and cultures of the rest of the world."⁴¹ The Afghan culture is antedated with corruption and it was apparent daily as my Battalion oversaw the Host Nation Trucking contract valued at over 2 billion dollars. Tierney remarked,

The principal contract supporting the U.S. supply chain in Afghanistan is called Host Nation Trucking, a \$2.16 billion contract split among eight Afghan, American, and Middle Eastern companies...[responsible] for providing trucking for over 70 percent of the total goods and materiel distributed to U.S. troops in the field, roughly 6,000 to 8,000 truck missions per month.⁴²

According to Tierney, "the HNT contract fuels warlordism, extortion, and corruption, and it may be a significant source of funding for insurgents."⁴³ Tierney declared "the Department of Defense has been largely blind to the potential strategic consequences of its supply chain contingency contracting."⁴⁴ Again, questioning or probing would have highlighted this deficiency.

As mentioned, one of the responsibilities in Afghanistan was to oversee and execute the National Afghan Trucking (NAT) or as noted by Tierney, the Host Nation Trucking contract. At the time (2014) the contract consisted of more than 16 companies. Corruption occurred daily. American vehicles were confiscated for profit and interrogated for vulnerabilities. The military frequently negotiated the retrieval of equipment. Many of the convoys were led by local national security forces who intentionally escorted convoys into the kill zone. Many local nationals who simply were trying to earn a living were massacred. Corruption is not isolated to just the trucking contract; it is obvious within other commodities such as electricity. Chatterjee asserted,

Indeed, the tale of the “reconstruction” of Kabul’s electricity supply is a classic story of how foreign aid has often served to line the pockets of both international contractors from the donor countries and the local political elite.⁴⁵

It is clear critical thinking skills, specifically questioning or probing, would have revealed the potential for corruption. Planners should have known about warlordism within the Afghan culture. Zinni and Koltz posit that, “One destabilizing factor in Afghanistan is warlordism. The country has been prone to warlordism throughout its history.”⁴⁶ If the military truly understood the culture, it would be reasonable to assume corruption, warlordism, and antics as described above were possible within a culture where corruption is a way of life.

Operation Anaconda is an example in which probing or questioning may have revealed a larger fighting force of insurgents, a needed robust indirect fire capability, and better enemy intelligence. Fleri, Howard, Hukill, and Searle report, “over time, intelligence estimates of actual enemy strength varied significantly and the numbers did not seem to be adjudicated during planning.”⁴⁷ They continued stating, “initially Task Force Mountain was not designated a joint task force which led to joint planning problems.”⁴⁸ The operation occurred on 1 – 18 March 2002 in the Shahi Kot Valley, Paktika Province Afghanistan. Although the US won this operation, probing may have resulted in a smoother operation and a reduction in loss of life.

In summary, the basic and CCC courses do not focus on critical thinking skills which ultimately affect the leader’s ability to think critically at the strategic level of wars as evident in the Iraq and Afghanistan wars. In short, strategic leaders are less likely to possess refined critical thinking skills because the PME curriculum does not develop skills to influence war planning and outcomes. This study was design to explore this line of reasoning.

Methodology

The theoretical tradition of hermeneutics was used as a design element of this study. Stanlick and Strawer define hermeneutic as the art of interpretation.⁴⁹ Documents are the only source of data. I used content analysis for the documents to make meaning of phenomenon under study. Grbich describes content analysis as a systemic coding and categorizing approach which you can use to unobtrusively explore large amounts of textual information in order to ascertain the trends and patterns of words used, their frequency, their relationships and the structures and discourses of communication.⁵⁰ In addition, coding the data is necessary to explore “major categories of information.”⁵¹

Documents used came from the search engine on the Air University’s Muir S. Fairchild Research Information Center website. I chose to use research-based peer-reviewed literature centered on instructional practices for the development of critical thinking skills. The majority of the literatures are readily available for use. The documents were coded using the process described by Miles and Huberman. Blanding writes, “Miles and Huberman identify three classes of codes: descriptive, interpretive, and pattern codes. They described descriptive and interpretive codes as attributing a class of phenomena to a segment of text and pattern codes as being inferential and explanatory.”⁵² The use of open coding was essential to analyze the data. Grbich declares, “open coding involves word by word, line by line analysis questioning the data in order to identify concepts and categories which can then be dimensionalised (broken apart further).”⁵³ By the use of descriptive codes, I grouped the data by unity to develop interpretive codes which led to themes bestowing meaning to the phenomenon.

There are several limitations to this study. For qualitative research, the use of a variety of data sources preserves the validity and reliability of the study. This is known as triangulation,

more specifically data triangulation which Patton defined as “the use of a variety of data sources in a study.”⁵⁴ Patton purports “triangulation strengthens a study by combining methods.”⁵⁵

Documents are the only source of data for this study consequently forming a limitation. Patton posits that “documents and records also have limitations. They may be incomplete or inaccurate,”⁵⁶ hence generating another limitation. A third limitation is the assumption instructors will have access to the research and will use it for class preparation. An external observer was used in an attempt to override the researcher’s potential biases.

Discussion of Findings

The intent of this hermeneutical qualitative study was to explore the Army’s OES to enhance critical thinking skills earlier in an officer’s career. Documents were the only source of data. Content analysis applied in this study aided in gaining meaning of the phenomenon by identifying four relevant themes: 1) Creating a safe environment; 2) Factors associated with critical thinking; 3) Underprepared Teachers; and 4) Ineffective Instructional Practices.

Creating a safe environment was referenced 20 times within the documents. I define this theme as an environment free of criticism facilitating student exploration. Students must feel safe and free from judgment in order to think critically. Gul et al. purport, “a learning environment that is affirmative, constructive and rewarding is likely to foster thinking.”⁵⁷ Factors associated with critical thinking were referenced several times within the research. Factors consisted of questioning and or probing which resulted in “sound conclusion” as noted by Moore. I define this theme as the use of questioning or probing to ensure the best plan is presented. Moore posits, “Critical thinking involves asking critical questions that will lead to a sound conclusion, thus resulting in a sound decision.”⁵⁸ The theme, underprepared teachers, was quoted 26 times within the research. I define this theme as teachers untrained in developing student’s critical thinking

skills. Teachers must be responsible for developing critical thinking which is best described by Kyle Moore when he stated that,

the instructor is responsible for harmonizing critical thinking, decision-making, and adult learning in that they must create a learning environment that fosters a desire in adult learners to recognize the need for critical thinking.⁵⁹

The last theme, ineffective instructional practices, was referenced 46 times within the research. I define this theme as instructional practices that are useless for developing critical thinking skills. The research supports the use of problem-based learning, writing reflective journals, role-playing, concept mapping, debates, discussion, and cooperative learning to promote critical thinking. The next section includes several recommendations as a result of the findings.

Conclusion and Recommendations

This qualitative project explored the possibilities for refining the Army's OES. The overarching question that guides this inquiry was: How should the Army refine the Officer Education System to enhance the critical thinking skills much earlier in their careers? Two sub-questions were addressed:

- 1) How can the Army implement critical thinking within OES curriculum?
- 2) What support from leadership will be required in order to promote critical thinking at the tactical, operational, and strategic levels of war?

This inquiry centered on documents to provide meaning of the phenomenon which revealed four themes: 1) Creating a safe environment; 2) Factors associated with critical thinking; 3) Underprepared Teachers; and 4) Ineffective Instructional Practices. If implemented, the recommendations of this study can have a positive effect on the likelihood of strategic leaders

possessing refined critical thinking skills capable of solving complex problems encountered at the strategic level of war.

First Recommendation: Charge Functional Chiefs, i.e., the Chief of Transportation and the Quartermaster General to name a few, to select functional problems related to their specific branch/function and assign to members of the Basic and CCC for recommendation.

Second Recommendation: Provide Soldiers an opportunity to attend civilian classes focused on developing critical thinking skills. Partner with a local university or one that has a habitual relationship established with the military. I do not recommend using distance learning in this case.

Third Recommendation: There must be future research to assess the value of CGSOC and War College's critical thinking courses.

Fourth Recommendation: Implement effective teacher workshops centered on how to develop critical thinking skills.

Fifth Recommendation: Use research based strategies, some of which are presented in this study, as a tool to guide a revision of the curriculum at the Basic and CCC.

Sixth Recommendation: To answer sub-question 2, apply the research strategies provided within this study during planning sessions. Additionally, minimize bureaucracy when possible and allow subordinates to think without fear and intimidation. A reculturing of the Army is necessary.

Endnotes

- ¹ Nancy A. Stanlick and Michael Strawser, *Asking Good Questions: Case Studies in Ethics and Critical Thinking*. (Indianapolis: Hackett Publishing Company, 2015). pp. 160.
- ² Stephen J. Gerras, PhD, *Strategic Leadership Primer, 3rd Edition*. (Carlisle Barracks, PA, United States Army War College, 2010) p. 1. Last modified on 9 August 2015, www.au.af.mil/au/awc/awcgate/army-usawc/sprimer.pdf.
- ³ U.S. Department of Defense, Quadrennial Defense Review 2014. Last modified on 9 August 2015, www.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf
- ⁴ James W. Browning. *Leading at the Strategic Level in an Uncertain World*. (Washington DC, National Defense University) p. 121.
- ⁵ Joseph A. Maxwell. *Qualitative Research Design: An Interactive Approach*. (Thousand Oaks, CA: Sage, 2005)
- ⁶ Charles D. Allen, COL and George J. Woods, PhD. *Developing Army Enterprise Leaders in the Military Review*. (Fort Leavenworth, KS, US Army CAC, 2015), 43.
- ⁷ Ibid, 43.
- ⁸ Martin E. Dempsey, GEN. *Mission Command White Paper*. (Washington DC: The Pentagon, 2012) p. 6.
- ⁹ Bill Patnaude and Gene Kamena, *Strategic Thinking Primer* (Maxwell AFB, Air War College, 2014), 6.
- ¹⁰ Robert T. Ault. *Encouraging Risk and Embracing Uncertainty: The Need to Change U.S. Army Culture*. (Fort Leavenworth, School of Advanced Military Studies, 2002 – 2003), pp. 29.
- ¹¹ Ibid, 30.
- ¹² John W. Creswell. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. (Thousand Oaks, CA: SAGE Publications, 2007). pp. 37
- ¹³ Andrew Tilghman. *Plan: Send More Troops to Civilian Schools*. (Army Times, 08.31.2015) pp. 6.
- ¹⁴ Ibid, 6.
- ¹⁵ Susan G. Straus, Michael G. Shanley, James C. Crowley, Douglas Yeung, Sarah H. Bana, and Kristin J. Leuschner. *Developing Army Leaders: Lessons for Teaching Critical Thinking in Distributed, Resident, and Mixed-Delivery Venues*. (Santa Monica, CA: Rand Offices, 2014). pp. xv.
- ¹⁶ Richard W. Paul and Linda Elder. *Critical Thinking: Tools for Taking Charge of Your Professional and Personal Life*. (Upper Saddle, NJ: Financial Times Prentice Hall, 2002), pp. 316.
- ¹⁷ Andrew J. Bacevich, Jackson Diehl, Michael V. Hayden, Walter Laqueur, Meghan L. O'Sullivan, Richard Perle, David Rieff, and Paul D. Wolfowitz. *Lessons Learned: The Iraqi Invasion*. (World Affairs, May/June 2013), p. 29.
- ¹⁸ Carl von Clausewitz, *On War*, ed. Michael Howard and Peter Paret. (Princeton, NJ: Princeton University Press, 1976), pp. 86 -87.
- ¹⁹ Kyle Moore. *The Three-Part Harmony of Adult Learning, Critical Thinking, and Decision-Making*. *Journal of Adult Education*, Vol 31, No. 1, 2010, 7.
- ²⁰ Nancy A. Stanlick and Michael Strawser. *Asking Good Questions: Case Studies in Ethics and Critical Thinking*. (Indianapolis: Hackett Publishing Company, 2015). pp. 5.

²¹ Elise D. Wallace and Renee N. Jefferson. *Developing Critical Thinking Skills: Assessing the Effectiveness of Workbook Exercises*. Journal of College Teaching and Learning, Vol. 12 No. 2. p.101.

²² Raisa B. Gul, Shehla Khan, Azra Ahmed, Shanaz Cassum, Tanveer Saeed, and Yasmin Parpio. *Enhancing Educators' Skills for Promoting Critical Thinking in Their Classroom Discourses: A Randomized Control Trail*. International Journal of Teaching and Learning in Higher Education, 2014, Volume 26, No 1, pp. 38.

²³ S. Karabulut. *How To Teach Critical-thinking In Social Studies Education: An Examination of Three NCSS Journals*. Egitim Arastirmalarti Eurasian Journal of Educational Research, 49, 2012, pp. 197-214.

²⁴ Elise D. Wallace and Renee N. Jefferson. *Developing Critical Thinking Skills: Assessing the Effectiveness of Workbook Exercises*. Journal of College Teaching and Learning, Vol. 12 No. 2, pp.101.

²⁵ Ibid, 101.

²⁶ Stephen D. Brookfield. *Developing Critical Thinkers: Challenging Adults to Explore Alternative Ways of Thinking and Acting*. (San Francisco: Jossey-Bass Publishers, 1987), 71.

²⁷ Ibid, 71.

²⁸ Carlos Saiz¹, Silvia F. Rivas and Sonia Olivares. *Collaborative learning supported by rubrics improves critical thinking*. Journal of the Scholarship of Teaching and Learning, Vol. 15, No. 1, February 2015, pp. 10 - 19.

²⁹ Richard W. Paul and Linda Elder. *Critical Thinking: Tools for Taking Charge of Your Professional and Personal Life*. (Upper Saddle River, NJ: Pearson Education, 2002). 232.

³⁰ Ibid, 234.

³¹ Ibid, 234.

³² Robert T. Ault. *Encouraging Risk and Embracing Uncertainty: The Need to Change U.S. Army Culture*. (Fort Leavenworth, School of Advanced Military Studies, 2002 – 2003), pp. 30.

³³ Department of the Army. *Charlie Batter, 1-30th Field Artillery Regiment, Academic Requirements and Academic Policy for the Field Artillery Captain's Career Course*. Last modified on 16 August 2015, www.army.mil/.../academic_policy_2013.pdf.

³⁴ Tony Zinni and Tony Koltz. *The Battle for Peace: A Frontline Vision of America's Power and Purpose*. (New York: Palgrave MacMillan, 2006) pp. 8.

³⁵ Thomas R. Mockaitis. *The Iraq War: Learning from the Past, Adapting to the Present, and Planning For the Future*. (Carlisle PA: U.S. Army War College, Strategic Studies Institute, 2007), pp. 47.

³⁶ Tony Zinni and Tony Koltz. *The Battle for Peace: A Frontline Vision of America's Power and Purpose*. (New York: Palgrave MacMillan, 2006) pp. 9.

³⁷ Thomas R. Mockaitis. *The Iraq War: Learning from the Past, Adapting to the Present, and Planning For the Future*. (Carlisle PA: U.S. Army War College, Strategic Studies Institute, 2007), pp. 24.

³⁸ Jeffrey Record. *Beating Goliath: Why Insurgencies Win*. (Washington DC: Potomac Books, Inc.) pp. 19.

³⁹ Rebecca Leung. *Gen. Zinni: They've Screwed Up*. Last modified on 4 September 2015, www.cbsnews.com/news/gen-zinni-theyve-screwed-up/.

⁴⁰ Ibid, n.p.

⁴¹ Andrew Scobell. *China and Strategic Culture*. (Carlisle PA: Strategic Studies Institute, U.S. Army War College, 2002) p. 20.

⁴² John F. Tierney. *Warlord, Inc.: Extortion and Corruption along the U.S. Supply Chain in Afghanistan in Corruption, Contractors, and Warlords in Afghanistan*, edited by Jacob E. Jankowski. (New York: Nova Science Publishers, Inc. 2011). pp. 3.

⁴³ Ibid, 4.

⁴⁴ Ibid, 4.

⁴⁵ Pratap Chatter. "Paying off the Warlords: Anatomy of a Culture of Corruption." In the *Case for Withdrawal from Afghanistan 2010*, ed. Nick Turse. (New York: Verso, 2010). pp. 82.

⁴⁶ Tony Zinni and Tony Koltz. *The Battle for Peace: A Frontline Vision of America's Power and Purpose*. (New York: Palgrave MacMillan, 2006) pp. 124.

⁴⁷ Edgar Fleri, Ernest Howard, Jeffrey Hukill, Thomas R. Searle. *Operation Anaconda Case Study*. (Maxwell, AFB, College of Aerospace Doctrine, Research and Education, 2013). pp. 19.

⁴⁸ Ibid, 19.

⁴⁹ Nancy A. Stanlick and Michael Strawser. *Asking Good Questions: Case Studies in Ethics and Critical Thinking*. (Indianapolis: Hackett Publishing Company, 2015). pp. 196.

⁵⁰ Carol Grbich. *Qualitative Data Analysis: An Introduction*. (Los Angeles: SAGE Publications, 2007), pp. 112.

⁵¹ John W. Creswell. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. (Thousand Oaks, CA: SAGE Publications, 2007). pp. 64.

⁵² Joseph Dwayne Blanding. *A Phenomenological Case Study of African American Students Who Achieved Success Despite Scoring Low on Standardized Tests*. (Kansas City, Missouri: University of Missouri at Kansas City, 2010). pp. 145.

⁵³ Carol Grbich. *Qualitative Data Analysis: An Introduction*. (Los Angeles: SAGE Publications, 2007), pp. 74.

⁵⁴ Michael Quinn Patton. *Qualitative Research and Evaluation Methods*. (Thousand Oaks, CA: SAGE Publications, 2002). pp. 247.

⁵⁵ Ibid, 247.

⁵⁶ Michael Quinn Patton. *Qualitative Research and Evaluation Methods*. (Thousand Oaks, CA: SAGE Publications, 2002). pp. 306.

⁵⁷ Raisa B. Gul, Shehla Khan, Azra Ahmed, Shanaz Cassum, Tanveer Saeed, and Yasmin Parpio. *Enhancing Educators' Skills for Promoting Critical Thinking in Their Classroom Discourses: A Randomized Control Trail*. *International Journal of Teaching and Learning in Higher Education*, 2014, Volume 26, No 1, 38.

⁵⁸ Kyle Moore. *The Three-Part Harmony of Adult Learning, Critical Thinking, and Decision-Making*. (*Journal of Adult Education*, Vol 31, No. 1, 2010), pp. 7.

⁵⁹ Ibid, 8.

Bibliography

- Air University. *The Air University Catalog 2014 – 2015*. (Maxwell Air Force Base, Alabama, 2014).
- Allen, Charles D., COL and George J. Woods, PhD. *Developing Army Enterprise Leaders in the Military Review*. (Fort Leavenworth, KS, US Army CAC, 2015).
- Ault, Robert T. *Encouraging Risk and Embracing Uncertainty: The Need to Change U.S. Army Culture*. (Fort Leavenworth, School of Advanced Military Studies, 2002 – 2003).
- Bacevich, Andrew J., Jackson Diehl, Michael V. Hayden, Walter Laqueur, Meghan L. O’Sullivan, Richard Perle, David Rieff, and Paul D. Wolfowitz. *Lessons Learned: The Iraqi Invasion*. (World Affairs, May/June 2013).
- Blanding, Joseph Dwayne, Dr. *A Phenomenological Case Study of African American Students Who Achieved Success Despite Scoring Low on Standardized Tests*. (Kansas City, Missouri: University of Missouri at Kansas City, 2010).
- Brookfield, Stephen D. *Developing Critical Thinkers: Challenging Adults to Explore Alternative Ways of Thinking and Acting*. (San Francisco: Jossey-Bass Publishers, 1987).
- Browning, James W. *Leading at the Strategic Level in an Uncertain World*. (Washington DC, National Defense University).
- Clausewitz, Carl von. *On War*, Edited by Michael Howard and Peter Paret. (Princeton, NJ: Princeton University Press, 1976).
- Chatter, Pratap. “Paying off the Warlords: Anatomy of a Culture of Corruption.” In the *Case for Withdrawal from Afghanistan 2010*, Edited by Nick Turse. (New York: Verso, 2010).
- Creswell, John W. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. (Thousand Oaks, CA: SAGE Publications, 2007).
- Dempsey, Martin E., GEN. *Mission Command White Paper*. (Washington DC: The Pentagon, 2012).
- Department of the Army. *Charlie Batter, 1-30th Field Artillery Regiment, Academic Requirements and Academic Policy for the Field Artillery Captain’s Career Course*. Last modified on 16 August 2015, www.army.mil/.../academic_policy_2013.pdf.
- Fleri, Edgar, Ernest Howard, Jeffrey Hukill, Thomas R. Searle. *Operation Anaconda Case Study*. (Maxwell, AFB, College of Aerospace Doctrine, Research and Education, 2013).

- Gerras, Stephen J. PhD. *Strategic Leadership Primer, 3rd Edition*. (Carlisle Barracks, PA, United States Army War College, 2010) p. 1. Last modified on 9 August 2015, www.au.af.mil/au/awc/awcgate/army-usawc/sprimer.pdf.
- Grbich, Carol. *Qualitative Data Analysis: An Introduction*. (Los Angeles: SAGE Publications, 2007).
- Gul, Raisa B., Shehla Khan, Azra Ahmed, Shanaz Cassum, Tanveer Saeed, and Yasmin Parpio. *Enhancing Educators' Skills for Promoting Critical Thinking in Their Classroom Discourses: A Randomized Control Trail*. *International Journal of Teaching and Learning in Higher Education*, 2014, Volume 26, No 1.
- Karabulut, S. *How To Teach Critical-thinking In Social Studies Education: An Examination of Three NCSS Journals*. *Egitim Arastirmalarti Eurasian Journal of Educational Research*, 49, 2012.
- Leung, Rebecca. *Gen. Zinni: They've Screwed Up*. Last modified on 4 September 2015, www.cbsnews.com/news/gen-zinni-the-ye-screwed-up/.
- Lewis, John Wilson and Xue Litai. *Imagined Enemies: China Prepares for Uncertain War*. (Sanford, CA: Stanford University Press, 2006).
- Lyle, David J. *Operation Anaconda: Lesson Learned or Lessons Observed?* (Fort Leavenworth, Kansas, Command and General Staff College, 2009).
- Mason, Mark. *Critical Thinking and Learning in Critical Thinking and Learning*. (Malden, MA: Blackwell Publishing, 2008).
- Maxwell, Joseph A. *Qualitative Research Design: An Interactive Approach*. (Thousand Oaks, CA: Sage, 2005).
- Mockaitis, Thomas R. *The Iraq War: Learning from the Past, Adapting to the Present, and Planning For the Future*. (Carlisle PA: U.S. Army War College, Strategic Studies Institute, 2007).
- Moore, Kyle. *The Three-Part Harmony of Adult Learning, Critical Thinking, and Decision-Making*. *Journal of Adult Education*, Vol 31, No. 1, 2010.
- Narayanan, Sowmya and M. Adithan. *Analysis of Questions Papers in Engineering Courses With Respect to Hots (Higher Order Thinking Skills)*. *American Journal of Engineering Education*, June 2015, Vol 6, Number 1.
- Patnaude, Bill and Gene Kamena, *Strategic Thinking Primer* (Maxwell AFB, Air War College, 2014).

- Patton, Michael Quinn. *Qualitative Research and Evaluation Methods*. (Thousand Oaks: SAGE Publications, 2002).
- Paul, Richard W. and Linda Elder. *Critical Thinking: Tools for Taking Charge of Your Professional and Personal Life*. (Upper Saddle, NJ: Financial Times Prentice Hall, 2002).
- Peter, Gavan, Longley Watson, and Natasha Kenny. *Teaching Critical Reflection to Graduate Students*. *Collected Essays on Learning and Teaching*, Vol. 7 No, 1 (2014).
- Record, Jeffrey. *Beating Goliath: Why Insurgencies Win*. (Washington DC: Potomac Books, Inc.).
- Saizl, Carlos, Silvia F. Rivas and Sonia Olivares. *Collaborative learning supported by rubrics improves critical thinking*. *Journal of the Scholarship of Teaching and Learning*, Vol. 15, No. 1, February 2015.
- Scobell, Andrew. *China and Strategic Culture*. (Carlisle PA: Strategic Studies Institute, U.S. Army War College, 2002).
- Stanlick, Nancy A. and Michael Strawser, *Asking Good Questions: Case Studies in Ethics and Critical Thinking*. (Indianapolis: Hackett Publishing Company, 2015).
- Straus, Susan G., Michael G. Shanley, James C. Crowley, Douglas Yeung, Sarah H. Bana, and Kristin J. Leuschner. *Developing Army Leaders: Lessons for Teaching Critical Thinking in Distributed, Resident, and Mixed-Delivery Venues*. (Santa Monica, CA: Rand Offices, 2014).
- Tierney, John F. *Warlord, Inc.: Extortion and Corruption along the U.S. Supply Chain in Afghanistan in Corruption, Contractors, and Warlords in Afghanistan*, edited by Jacob E. Jankowski. (New York: Nova Science Publishers, Inc. 2011).
- Tilghman, Andrew. *Plan: Send More Troops to Civilian Schools*. (Army Times, 08.31.2015).
- U.S. Department of Defense, Quadrennial Defense Review 2014. Last modified on 9 August 2015, www.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf.
- United States Marine Corps. “*Expeditionary Warfare School Command Brief*” (presentation, Marine University, Quantico, VA, 16 January 2015).
- Wallace, Elise D., and Renee N. Jefferson. *Developing Critical Thinking Skills: Assessing the Effectiveness of Workbook Exercises*. *Journal of College Teaching and Learning*, Vol. 12 No. 2.
- Zinni, Tony and Tony Koltz. *The Battle for Peace: A Frontline Vision of America’s Power and Purpose*. (New York: Palgrave MacMillan, 2006).