Improving Learning with the Critical Thinking Paradigm:

MIBOLC Modules A and B

2LT Jessica H. Gilman

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Uncertainty and change are constants in the military profession, particularly in the branch of Military Intelligence. Decisions and operational recommendations must be made based on analysis of available intelligence information. More often than not, gaps in intelligence and questionable source reliability increase the inherent difficulty of analysis. The goal of Military Intelligence Basic Officer Leader Course (MIBOLC) is to produce officers who can think critically in order to analyze an overabundance of disputable information for pertinent data and recommend decisions and courses of action based on that analysis. To achieve that goal, officers need to engage critical thinking when learning how to be analysts. In the current MIBOLC course structure, comprised of five modules, information taught in Modules A and B serve as the basic knowledge and theoretical foundation officers need to effectively execute Military Intelligence functions. The critical thinking paradigm has been introduced to course instruction; however, a strong tie to traditional teaching paradigms still remains. In order to effectively train officers to utilize the fundamental knowledge taught in Modules A and B, the reliance on traditional teaching methodology must be destroyed and replaced by a dynamic critical thinking approach. As opposed to the traditional lecture methodology centered on PowerPoint and multiple choice exams, the tactics, techniques and procedures of a critical thinking paradigm include engaged lecture, Socratic questioning,[1] use of tests which provide minimal guidance to achieve the "correct" answer, and learning through minimal success and sometimes even failure.

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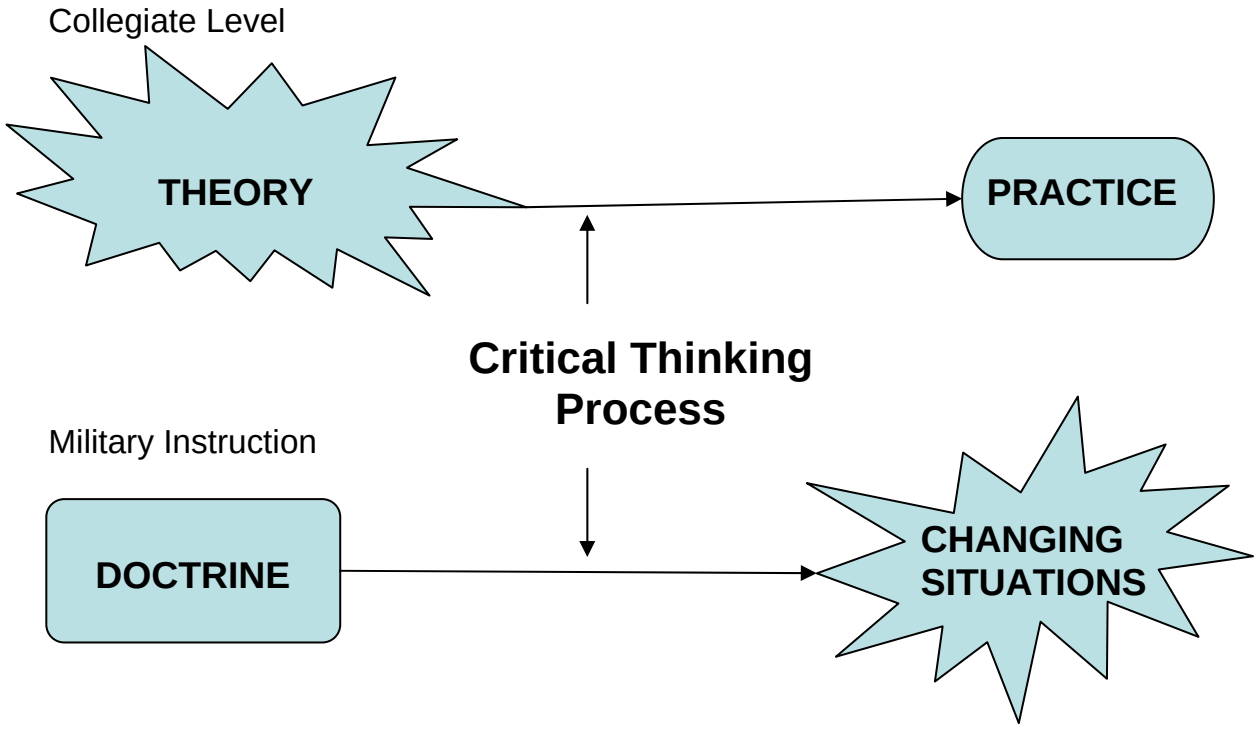
The challenges associated with the paradigm include the difficulty of mental effort and the requirement for a higher level of effort from both students and instructors.

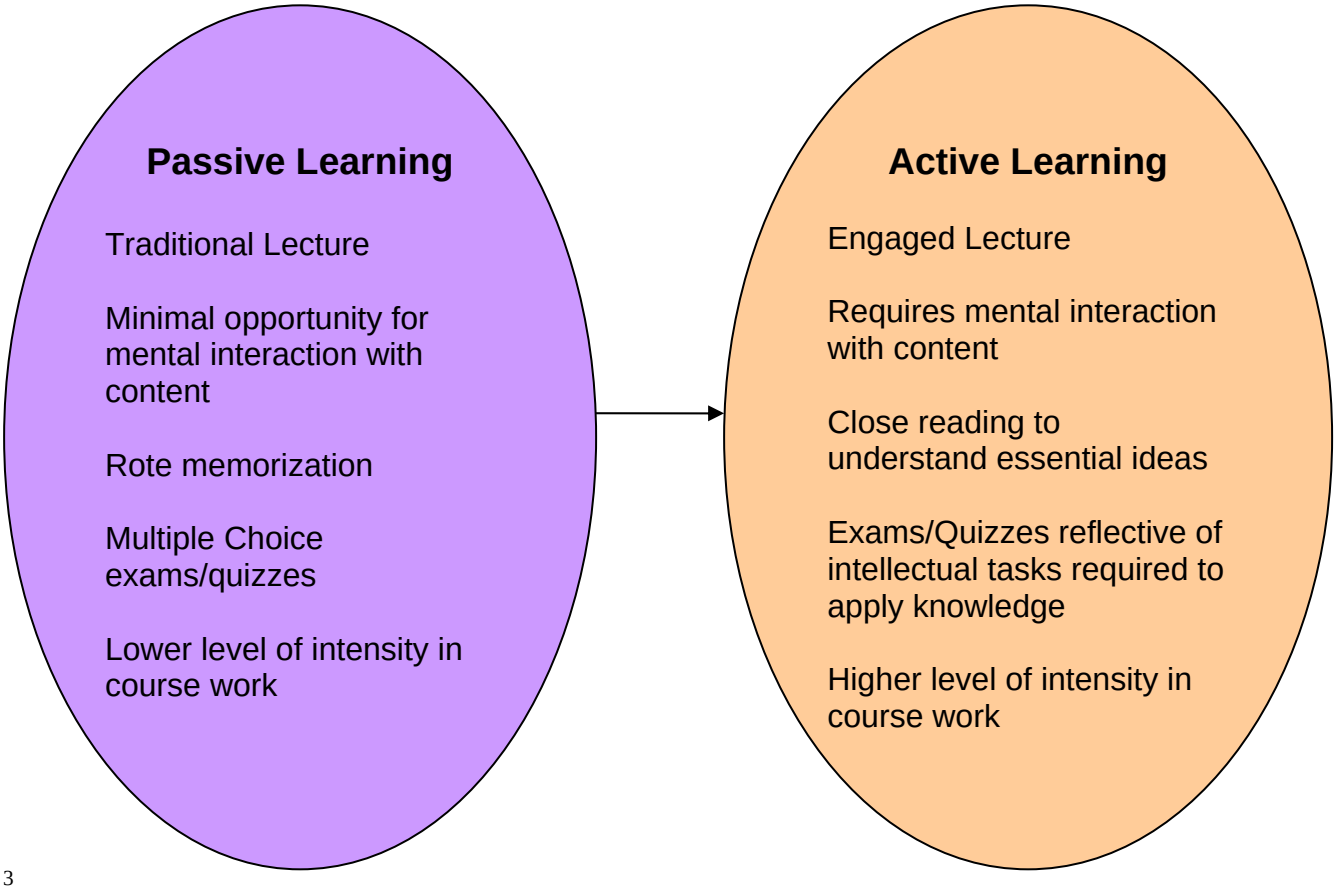
Recently, critical thinking has been one of the high profile topics of discussion in the educational field.[2] There are many and various definitions of critical thinking, but for the purposes of this article the definition is best encapsulated by the following graphic:



At the collegiate level, students are taught broad theoretical knowledge which can be reined in and put into practice through the use of the critical thinking process. In military instruction, students are taught doctrine as a template that must be put through the critical thinking process to be applied effectively to dynamic situations. The critical thinking process is also what combines the knowledge of the collegiate and military institutions and offers understanding of the theory driving doctrine.

Currently, the Adult Learning Model is the foundation for the new MIBOLC course structure implemented in November, 2008. The course consists of five modules: Module A

covers general warfare to include the Military Decision Making Process (MDMP) and Intelligence Preparation of the Battlefield (IPB), Module B covers counterinsurgency and asymmetric warfare, Module C is an overview of various intelligence concentrations such as Human intelligence and Signal Intelligence as well as a practical application of knowledge in a four-day Afghanistan Scenario practical exercise, Module D consists of a practical application of knowledge in a five-day Iraq Scenario practical exercise, and Module E is a joint exercise integrating lieutenants, captains, and warrant officers in a JI-CTC practical exercise.



[3]

The previous course structure, based on the traditional paradigm of lectures and multiple choice quizzes, fostered passive learning. The Adult Learning Model encourages more active learning by requiring much of the learning material to be read prior to classroom instruction, and allotting more time to practical exercises. MIBOLC currently also includes a two-day block of instruction

on Critical Thinking. The course organizing idea can be summed up as that of training officers to be combat effective leaders that think and question through doctrine and apply knowledge and skills to assigned tasks.

The objective of abandoning traditional instruction is to train officers to make the leap from the classroom environment to practical application. In order to make that leap, there is a need to understand underlying theories and how to apply knowledge effectively. To gain that understanding, students must be taught to think critically. Emphasis must be shifted from passive listening to active listening, active reading and writing, and disciplined discussion. The problem lies in how to foster and maintain motivation in students and instructors to perform activities that are difficult and require sustained engaged thinking. In order to prepare students for that challenge a pre-MIBOLC reading list covering basic knowledge needed for informed discussion should be issued through the commissioning sources. Dissemination would be conducted through ROTC Programs or LDAC, West Point's MI Branch Representative, OCS and the MIBOLC website. Upon inprocessing, a study guide would also be issued to the student. The study guide should include all read-ahead assignments and lecture slides, as well as reading focus questions for each module of the course. The guide should also include the specific goals in terms of "Terminal Learning Objectives" and "Enabling Learning Objectives" for each module and sub module. By supplying the reading assignments, focus questions and the desired end-state the student can tailor a close reading of the materials to achieve the stated goals. Throughout the course, the desired goals must be emphasized through continual reiteration of the intent to integrate knowledge into existing thought patterns and to use that knowledge. That emphasis will assist students as well as instructors with avoiding a gradual slip back into less involved traditional learning.

The critical thinking paradigm in Modules A and B would augment the existing Adult Learning Model. Using the initial issue study guide, students read the materials required for the next day's instruction. Thoughtful and engaged reading is facilitated by the focus questions which encourage structural reading and close reading. Structural reading focuses on the underlying ideas of the book or manual as a whole, giving the student perspective as to where and how the reading fits into the bigger picture.[4] For example, a focus question for the Module A and B readings would require the student to summarize the basic ideas of the assigned manual as discerned from the table of contents and introductory portions, and indicate how the manual and the reading assignment support doctrine. Close reading mentally engages the student with the material being read and thereby increases the amount of useable knowledge and understanding of the subject retained. A close reading focus question would require the student to stop periodically throughout the reading to summarize and paraphrase portions of the material to determine the underlying "essential idea."[5] The student's understanding of the reading and lecture slides would be tested by means of a practical exercise (PE) style quiz at the start of the following day's instruction. The PE challenges students to apply key concepts from the reading to specific situations. Because the PE would offer only minimal guidance, completing it would be challenging and would require the use of critical thinking skills and an understanding of the material as opposed to rote memorization. The PE quiz would be presented to the class for a peer-review facilitated by the instructor. This review allows the instructor time and means to make a preliminary assessment for a "superior", "satisfactory", or "unsatisfactory" grade. The review also offers students opportunity to learn by way of explaining their thinking behind their answer to the PE to their peers. Peers also learn from exposure to an alternate perspective and by analyzing the viability of their peer's answer. Instructors would facilitate the discussion and

focus on two or three intellectual standards[6] such as clarity, depth of thought, and relevance. Any key concepts not covered by the reading or the PE presentation, or concepts needing reinforcement, would be covered in an engaged lecture emphasizing active listening, Socratic questioning and guided discussion. In engaged lecture, students are asked to paraphrase, elaborate, or illustrate important lecture points or reading points, or to summarize comments made by other students.[7] Engaged lectures can also include instructor facilitated debates concerning the materials being learned, such as the pros and cons of using the pattern analysis plot wheel or MDMP. Interacting with the thought process of others encourages deeper understanding of the material and a variety of applications.

Understanding the methodology and intent of the critical thinking paradigm is crucial to effectively integrating it into MIBOLC. Augmenting the current Adult Learning Model and cutting ties with traditional learning methodologies increases students' learning through the integration of knowledge and its applicability to realistic scenarios. The critical thinking paradigm enables students to combine the critical thinking processes of collegiate and military instruction. Theory and doctrine are more completely understood by the student, resulting in a more effective application of knowledge to practical situations in the changing environment which the student will be working in upon graduation.

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[1] Paul, Richard and Linda Elder. How to Improve Student Learning: 30 Practical Ideas. Dillon Beach, CA: Foundation for Critical Thinking Press. 2007.

[2] Paul, Richard, and Linda Elder. A Critical Thinker's Guide to Educational Fads. Dillon Beach, CA: Foundation for Critical Thinking Press, 2007.

[3] Paul, Richard and Linda Elder. How to Improve Student Learning: 30 Practical Ideas. Dillon Beach, CA: Foundation for Critical Thinking Press. 2007.
Paul, Richard, and Linda Elder. How to Study and Learn. Dillon Beach, CA: Foundation for Critical Thinking Press, 2007.
Hiler, Wesley and Richard Paul. Active and Cooperative Learning. Dillon Beach, CA: Foundation for Critical Thinking Press, 2006.

[4] How to Study and Learn 23.

[5] How to Study and Learn 23.

[6] Paul, Richard and Linda Elder. The Miniature Guide to Critical Thinking: Concepts and Tools. Dillon Beach, CA: Foundation for Critical Thinking Press. 2008. 8

[7] How to Improve Student Learning: 30 Practical Ideas 13.