Developing Military Leaders in and out of the classroom
A Literature review of Outcomes Based Training and Education

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Author Information

After returning from my third combat tour in the 82nd Airborne Division, I was given the dream job of Military Science (MS) Instructor at the United States Military Academy (USMA). What could be a greater honor than having the opportunity to facilitate the military development of the best and brightest that America has to offer, and the future of the United States Army!

Upon arrival I was immediately introduced to Outcomes Based Training and Education (OBTE) as the preferred teaching method in the Department of Military Instruction (DMI). Since then I have facilitated OBTE in thirteen military science classes that were forty lessons each, developed a course for Soldier First Responder medical training, and developed a forty lesson MS course based on the OBTE concept. In my experience, I have determined that if the OBTE method of instruction is used properly in and out of the classroom, then it will serve as a successful teaching method for military training.

I have prepared this review to communicate the usefulness of OBTE for anyone interested in the subject, or anyone required to use the method for future training or facilitation. In this review I will cover the history, definition, beneficial attributes, and the controversial aspects of OBTE. Additionally, in the annotated bibliography I will provide my summary and synthesis of the most influential, current, and useful resources I have encountered. In my opinion OBTE is the best teaching or training methodology that I have used in the military. It bridges the gap between traditional field and classroom instruction with a holistic approach that better serves both venues.

Topic Overview

OBTE is a teaching philosophy that takes the best aspects of multiple pedagogical models and ideas, and puts them to use. These models and ideas include outcomes based education, active learning, cooperative learning, the case method, and the adaptive course model to name a few.

OBTE is currently defined as a philosophy of training and education that focuses on the holistic development of the individual. OBTE enables the student to master a subject, apply the subject appropriately, and synthesize it with other knowledge... This philosophy promotes the development of adaptive thinking, individual initiative, collective agility, and most importantly, confidence of participants in all aspects of training and education (McDaniel 2009).
History of Practice

March 2006, the AWG was activated and based at Fort Meade, Md., created to help units combat the asymmetric tactics, such as suicide bombers and improvised explosive devices, employed in full-spectrum operational environment. AWG began working with training centers at Fort Jackson, S.C., and Fort Benning, Ga. (Ferguson) There LTC Michael Lerio introduced COL Haskins to Scott Flannigan in respect to their endeavors. COL Haskins at that point first introduced the AWG representative of a systemic approach to instruction based on long-term outcomes and associated best practices in military leadership. (Riccio, G., Diedrich, F., and Cortes, M. 2010). From there the AWG’s subject matter experts began conducting OBT&E workshops, and created the Combat Application Training Course to serve as the vehicle for explaining and spreading the methodology (Ferguson 2008).

March of 2008, the AWG initiated a scientific and technical effort to help define and develop OBTE. The objective of this research was to enable the integration and development of OBTE as instructional capabilities, in both the Generating Force and the Operating Force, that are closely linked with the needs of Full Spectrum Operations (Riccio, G., Diedrich, F., and Cortes, M. 2010).

Summer 2008, COL Casey Haskins brings the concept of OBTE to the United States Military Academy as the head of the Department of Military Instruction. The philosophy was used to modernize cadet field training and the military science courses in the classroom.

2008 and 2009 the Army Training Network (ATN) team conducted a series of interviews around the Army on OBTE to determine the effectiveness of the philosophy. Their findings were that Soldier enjoyed using OBTE, and found it helpful for executing a successful training exercise.

March of 2009, The Johns Hopkins University Applied Physics Laboratory (JHU/APL), along with the AWG, held an integration workshop that brought together leaders, instructors, course designers, and others from across the Army, Joint, and Interagency communities to discuss OBTE and its implementation in current and future Army courses. The workshop combined calls for change from Army leadership with first-person accounts of OBTE implementation to demonstrate how OBTE meets the needs of the Army under Full Spectrum Operations (FSO). The workshop also explored the challenges posed by implementing OBTE principles, setting the stage for an improved OBTE Implementation Guide, and opening opportunities at both the implementation level and the leadership level for further integration of OBTE into Army training (McDaniel 2009).

April 2009, Units have been directed to implement OBTE approaches across individual entry training by LTG Freakley, the US Army Accessions Command (USAAC) Commander (Curry, C.J., Marken, W., and Cobb, J. 2009)
October 2009, the Joint War Fighting Center, Training Development Group, Analysis Division publish an information paper regarding how OBTE can be used in their organization to develop joint capability-knowledgeable problem solvers and those willing and able to take initiative.

February 2010, the maneuver center of excellence begins using OBTE for course development. The greatest influence is currently placed on restructuring the Army Reconnaissance Course (Perry, R. C., and McEnery, K. 2009)

March 2010, the AWG publish a monograph that documents the scientific and technical initiative conducted from March 2008 to March 2010. The purpose of this effort was to help define and develop OBTE (Riccio, G., Diedrich, F., and Cortes, M. 2010).

Currently, OBTE is being used throughout the Army as a philosophy for developing new and challenging training, and educational events.

**Beneficial attributes**

The most beneficial attribute to OBTE is that it focuses on the total development of the individual in relation to his or her mission or responsibility. Among other things, it develops: Mastery of the skills being trained, the intangible attributes required for success, and an understanding of the synthesis of these skills (McDaniel 2009).

OBTE relies upon the trainer’s growing expertise and judgment and does not specify one way to teach a particular topic, or to learn it. OBTE does not standardize by process or by inputs, but rather by results. Success is judged when students can solve a new problem to an acceptable level using their new skills. OBTE also recognizes that many problems have more than one acceptable solution. Thus, giving trained teachers as much latitude as possible to explicitly focuses at every step on developing “intangible” characteristics along with tangible skills such as critical thinking, judgment, problem solving, initiative, accountability (Haskins 2009).

The overall goal of OBTE is to prepare Soldiers to function well in full spectrum operations, and it offers a variety of strategies to enable progress toward such outcomes. A great example comes from the development of Soldiers through a field-based course in marksmanship (Combat Applications Training Course or CATC) In CATC, over a period of one week, instruction progresses from introductory levels (e.g., weapons system function, components and maintenance, shooting from a prone position) to more advanced and complex situations that combine moving, shooting, and communicating (e.g., highly mobile engagement of multiple targets from multiple positions). The instructional content covers elements of both Basic Rifle Marksmanship (BRM) and Advanced Rifle Marksmanship (ARM). It includes situated exercises that are complex and challenging due to the introduction of teamwork and activities focused on problem solving. General features of this developmental approach include transition from structured command-oriented tasks to less formal self-guided activities, as well as a gradual increase in task complexity and challenges. OBTE demonstrate how marksmanship
training can be achieved safely while encouraging individual accountability. Rather than the instructor assuming responsibility for safety alone, the students are expected to assume that responsibility along with instructors. This is important because, from the perspective of OBTE, Soldiers ultimately will be accountable in the field. Such accountability should be promoted as early as possible in the development of Soldiers. In the application of OBTE to marksmanship, students have accountability for behavior such as operationally appropriate weapons orientation and clearing (Riccio, G., Diedrich, F., and Cortes, M. 2010).

**Controversial Aspects**

At this time there has been very little information published directly regarding controversial aspects of OBTE. However, if you look at the components of OBTE there have been controversial aspects brought up. For example the notion of outcomes as values is perhaps the most controversial objection... Some critics argue outcomes "concern values, attitudes, opinions and relationships rather than objective information" and that OBE's goals are "affective (concerned with emotions and feelings) rather than academic" (Schlafly 1993).

Another major controversy focuses on the notion of content versus process. OBE systems may de-emphasize specific subject content in favor of broader outcomes, leaving educators with the difficult question of what content should remain in the curriculum (McNeir 1993). The lack of standardization to the general curriculum can cause a great deal of confusion with instructors and students.

A related concern is measurement and assessment. Broad-based outcomes are difficult to measure using standardized tests and traditional grading practices; therefore, new assessment techniques must be developed to measure specific outcomes. Proposals for assessment, such as a "portfolio" system that records a comprehensive array of student-performance indicators, have met with only limited success (Rothman 1993).

**Conclusion**

OBTE is an emerging teaching method for the United States Army that has application for training in the field, and in the classroom. Originally developed in 1996 by the U.S. Army AWG the practice has gained great momentum and is now used by multiple training centers to include the USMA. The most beneficial attribute to OBTE is that it focuses on the total development of the individual in relation to his or her mission or responsibility. (McDaniel 2009). The most controversial aspect of the practice is that OBE systems may de-emphasize specific subject content in favor of broader outcomes, leaving educators with the difficult question of what content should remain in the curriculum (McNeir 1993).
Annotated Bibliography

This monograph is the best all encompassing piece of literature there is on OBTE. It covers everything to include measures of effectiveness, principles and practices, values based training theory, and validation specifically for OBTE. The only issue that I had with the monograph is that it is very biased and gives no real evidence to any shortcoming to the methodology. However, it does provide an excellent background and description of the OBTE methodology as well as a description for putting it into practice.

This book was designed to teach the theory of maneuver warfare to marines. However, its real usefulness in regards to OBTE is not the focus on maneuver, but instead the teaching approach the author uses to get his points across. One of the principles of OBTE is the use of stories and scenarios to express ideas and validate learning. This book serves as a fantastic example of using military scenarios or vignettes to invoke thought from students, and express ideas as a facilitator. I highly recommend this book for anyone interested in developing OBTE tactical decision making exercises to support their outcomes.

Vandergriff, D. E. (2006) Raising the Bar: Creating and Nurturing Adaptability to Deal with the Changing Face of War:
The focus of this book is to help develop the next generation of military leaders. Its greatest contribution to the OBTE structure is the concept of the Adaptability Course Model (ACM). This philosophy is another of the base elements used for facilitating OBTE. This model focuses on developing tactical decision makers by teaching them “How to think” or solve problems versus “What to think” by providing a list or a process. The book also provides a very useful program of instruction on how to develop or use the ACM for building classes, Tactical decision making exercises, or courses.

Headquarters Department of the Army (2010) FM 5-0 The Operations Process, Chapter 3 Design:
This portion of the field manual provides a fresh look at problem solving for tacticians. The focus of the chapter is on the new “methodology for applying critical and creative thinking to understand, visualize, and describe complex, ill structured problems, and develop approaches to solve them.” This newly defined methodology takes the outlook on problem solving as does the OBTE concept. However, in many ways this is from my perspective the best published description of the problem solving method.

Spady, W. G. (1994) Outcomes Based Education: Critical Issues and Answers:
This book provides insight to one of the fundamental elements of OBTE which is OBE. It depicts the information necessary for understanding and implementing outcomes based education. That includes covering the concepts and terms necessary for understanding the teaching
philosophy and execution. This book was very helpful for developing a foundation in OBTE from an outcomes standpoint. However, it is important to remember that OBE is just one element of the OBT&E methodology. OBTE also includes training and facilitating the intangible attributes and competencies of individuals using scenarios and focusing on the why, not the how.


In many ways OBTE is considered to be a minimal guidance and problem-based method. This article clearly depicts many of the shortcomings and issues associated with that form of instruction to include a solid argument as to why they are less effective and inefficient. I agree with many of the points made within this article and recommend that anyone interested in OBTE read it to gain a better perspective on the subject. In my opinion there is no perfect teaching strategy, and this article simple points out a few of the potential drawbacks with the OBTE system.

Additional Resources

The AWG has many articles in reference to OBTE listed on their webpage. You will need AKO credentials to access the page. Once on the homepage type in OBTE into the search engine on the upper right of the page. This will bring up all of their OBTE articles.
http://www.awg.army.mil/

The Army Training Network has developed an OBTE resource page. However, you will need an AKO username and password to enter the site. From the homepage select products, and then go to products from the choices at the top of the page. Next select training enablers, and go down to Outcomes Based Training and education. This will provide a short library of current OBTE material.

There is another good OBTE library in AKO. In the AKO homepage search bar type and search OBTE. However, you will again need AKO credentials to log into the site.
https://www.us.army.mil/suite/kc/20427333

References


Riccio, G., Diedrich, F., and Cortes, M. (2010) An Initiative in outcomes based training and education. Implications for an integrated approach to values based requirements. The U.S. Army Asymmetric Warfare Group


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