An Assessment of the Practices of the Implementation of Active Learning in Combined Arms Academy

Taye Alemayehu

A Thesis Submitted to
Department of Educational Research

Presented in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Educational Research and Development

Addis Ababa University
Addis Ababa, Ethiopia

June, 2013

Addis Ababa University

School of Graduate Studies

This is to certify that the thesis presented by Taye Alemayehu, entitled: An assessment of practices of the Implementation of active learning in combined arms academy and submitted in partial fulfillment of requirements for the Degree of Master of Arts in (Educational Research and Development) complies with regulations of the university and meets the accepted standard with respect to originality and quality.

Signed by the Examining Committee:

Adviser Girma Lemma Signature ________ Date 27/06/13

Examiner Firdissa T. (Dr.) Signature ________ Date 27/06/13

Examiner Tesfaye Nebiyu (Dr.) Signature ________ Date 28/06/13

____

Chief of Department or Graduate Program Coordinator

ABSTRACT

An assessment of the practices of the Implementation of active learning in combined arms academy

Taye Alemayehu.

Addis Ababa University 2013

The main purpose of this study was to assess the practices of the implementation of the active learning approaches in the combined arms academy. In order to meet the objectives of the study, a descriptive survey design was employed. Twenty-two (22) teachers and 51 students were selected using availability sampling technique for this study. Three commandants of the academy were also selected using availability sampling. Questionnaires, interview and observation checklists were used for collecting data. Frequency distributions, percentages distributive statistics were used to analysis the quantitative data. The data obtained through open-ended of questions of the questionnaires and the interviews were qualitatively analyzed to supplement the quantitative data. Observation was conducted to supplement the data obtained through questionnaires and the interview. Lecture method was found to be the most commonly employed method of teaching followed by group discussion, problem solving and co-operative learning methods. Shortage of time to practice active learning in classroom and designing module were rated as the most serious problems among the factors that hindered the implementation of active learning. It has been recommended that creating awareness, continuous and intensive short-term and long term training should be offered for teachers to over come the challenges of implementation of active learning. Besides, to solve the factors that hider the proper implementation of the practice, the training main department and academy commandants should create conducive environments that help teachers' sufficient preparation and work time and provision of design of the modules and resources to implement active learning methods in their class.

Acknowledgements

First of all, I would like to express my sincere gratitude to my advisor Ato Girma Lema for his unreserved guidance, patience, diligence and understanding that made this study possible. His constructive comment by reading the whole paper critically is really appreciated. I also appreciate his punctuality and respect he has shown for me.

I also wish to extend my thanks to all commandants, teachers, students and staff of the Combined Arms Academy and EDCSC for their participation in the study and provision of data.

My deepest thanks and appreciation go to Br/General Meshesha G/Micael commandant of the combined arms academy, whose, kindness allowed and assisted me for learning success; and all artillery department instructors, and all my colleagues for all their support to finalize this study

Moreover, I would like to thank Addis Ababa University for financing my research to be carried out without any financial limitation.

Finally, I would like to express my deepest appreciation to my family, my wife W/ro Tsega Tesfaye, my son Kelo Taye, my son Robel Taye, my daughter Hidase Taye, my brother Amsalu Alemayehu for their commitment in encouraging me and providing financial support in doing the study.

TABLE OF CONTENTS

contents **Page**

LIST OF TABLE

Title **Page**

ACRONYMS

BA	Bachelor degree of Art
CAA	Combined Arms Academy
DUC	Defense University College
DTMD	Defense Training Main Department
ETP	Education and Training Policy
FDRE	Federal Democratic Republic of Ethiopia
ICDR	Institute for curriculum development and research
JPME	Joint Professional Military Education
MOE	Ministry of Education
MOND	Ministry of National Defense
TGE	Transitional Government of Ethiopia
USNMS	United State National Military Strategy

CHAPTER ONE

1. INTRODUCTION

In this chapter, the background of the study, statement of the problem, research questions, objectives of the study, significance of the study, delimitation of the study, limitation of the study, definition of key terms, and organization of the study have been treated one after the other.

1.1. Background of the study

Education is a universal practice in which society is engaged in all stages of development. One of the ultimate aims of education is to strengthen individuals and society's problem solving capacity and ability that people can solve different problems with the help of education. In addition, education enables people to identify harmful tradition and replace them by useful ones. Hence education does not operate in isolation; rather it has to be integrated with research, practice and development of the society. To get such result, an appropriate curriculum that can provide quality of education must be designed and implemented properly at all levels of education. Furthermore, the instructional materials must realize the methods that encourage active participation of the learners (MOE, 1994; pp.1-5).The quality of education is largely dependent on the type of instructions we use in the class room. Therefore, we should pay proper attention to change the strategy of old instructions and considerable efforts should be made to introduce new methods of instructions that make students to be problem solver (Ibid; 2).

Goor (1993) cited in Hayes (2000: 2) suggested that learning has to be effective in meeting the needs of culturally divers learners, students with disabilities in the general class room, and regular students. It helps student's make to make progress in their academicals fields', social skills, and in accepting the diversity. According to, Siler (1998), active learning is an instructional strategy which teachers use to capture the students' interest by allowing them to participate in the learning process. Active learning also demonstrates teachers' enthusiasm and commitment to the subject which further motivates students and yields of higher level of cognitive thinking. A popular non-traditional instructional approach towards learner-centred teaching is constructivism. A constructivist approach supports an environment where teachers

and students learn together so as to share knowledge. The Constructivist principles include discovery learning "real world" class room tasks, where the teacher serves as a facilitator and resource provider (Kaplan 1998, in Hayes, 2000: 3).

Effective teaching and learning require the use of different methodologies and strategies to meet the demands of the learners. The challenge is to find new ways and strategies to stimulate and motivate the creative abilities of today's generation who have various set of orientations towards learning than the learners in the past.

The traditional 'chalk and talk' approach where students are considered as, recipients of knowledge may not be suitable for today's generation. That is why in schools throughout the world there is a movement from learning that is made up of facts to a new model i.e. active-learning which emphasizes understanding, making connections of the world around us, collecting and using information in active manner (Leu,2000:10).

We should think of active-learning first and for most in terms of students are being intellectually active. By intellectually active we mean that teachers do not simply expect them to memorize and repeat facts. Teachers should expect students to use information critically and analytically. Supporting this, Nardos (2000:87) has also pointed out that in active learning, the learners have a marked degree of freedom and control over the organization of learning activities. Usually, these activities involve problem solving, inquiry and investigational work etc.

It is in the light of this argument that the Educational and Training Policy of Ethiopia states that "the instructional process shall emphasize problem solving as much as possible and it should be coordinated and integrated with research and development." Transitional Government of Ethiopia (1994: 8). According to FDRE (1994), due attention is given to the provision and appropriate usage of educational facility, technology, materials, environment, organization and management to strengthen the teaching-learning process and the expansion of education. The government of FDRE has established the vision and mission or duties of Ministry of Defense in Proclamation NO 27/1996 E.C and hence, the Ministry of Defense has also initiated the following objectives based on the mission that ministry of defense is supposed to accomplish. Such as:

1. Develop a capacity that helps to under take responsibility and combat effectively.
2. To be effective in executing function, developing scientific and democratic operational philosophy.
3. Develop the team working culture in the organization.
4. Create convenient organizational culture that assures operational readiness so as to secure the country from any possible risk.
5. Develop scientific knowledge to predict institutional scenario that helps to get first position which enables to under take responsibility in a better way.

Nowadays, the military strength of the country has become dependent more on the technological superiority and the efficiency of its professionals than the number of military personnel. That means instead of keeping large army, limited, well-trained and well-equipped professional army has become the demand of the day. To this end, the country has established Training Main Department (TMD) which plays a key role in strengthening the capacity of the Ethiopian Defense Force by producing competent and committed military personnel. Under this department, there are training institutions from the lower tactics up to the operational level colleges and academies which play crucial role to upgrade the qualification of its personnel that enable them cope up with the changing global environments of the army and socio-economic developments of other sectors. From the MoND Educational Institutions, the Combined Arms Academy (CAA) was established in **2007** by the training Main Department of the Minister of National Defense to produce competent tactical level commanders.

Interest of MoND which is expected from the Combined Arms Academy is to enable the FDRE Defense Force carry out its constitutional mission effectively. The educational and training institutions being a center of capacity building are expected to:

a. Develop capacity building centers to prepare competent human recourses for the current and future missions.
b. Produce democratic thinker, competent, mission oriented and professional man power
c. Establish standardized institutions which are able to cope up with the development of current situations and dynamism.

In order to produce the above capable and well-trained professional army, problem solving, effective teaching learning approaches should be institutionalized at all levels of Defense Training Main Department and its colleges.

Therefore, the purpose of this study is to assess the practices of the implementation of active learning approach in Combined Arms Academy and come up with the necessary recommendations that will help the CAA on the implementation of active learning approach.

1.2. Statement of the Problem

In teacher-centered approach, the teacher is considered to hold most of the knowledge necessary for students and student's success in schools was measured only by passing examination. The teacher uses chalk and talk method of teaching in which the teacher is active whereas the students are passive. This leads the students to the memorization of information and facts from their textbook and notes. This was considered to be the most effective method of teaching. This however, is the lowest level in the development of the cognitive abilities. That is why Amare (2000:10) noted the absence of appropriate balance between the concrete and the abstract experiences as one weakness of the teacher centered approach.

If the students are deprived of the necessary concrete experience during the teaching-learning process, such abilities as critical examination, analysis, synthesis and the like may remain underdeveloped. Therefore, as result of poor techniques and approaches used in schools, students may face serious problems of connecting school learning with their daily life. That means what students learn in classroom may not sufficiently prepare learners to understand their environment, solve problems and use information from their environment and other sources to make a better life.

These days, the role of the teacher is changed. Classrooms are places in which students learn rather than being mainly places in which teachers teach. Teachers are facilitators of learning. In this sense, students are given the freedom to explore areas based on their personal interests, and accompanied their striving solution by a supportive understanding facilitator, they are expected to achieve not only achieve high academic result, but also experiences and increase the personal

values, such as flexibility, self-confidence, social skills and problem-solving capacity(Peter, et al, 2000).

To this end, teachers at all levels of education are expected to implement active learning to attain the desired goal. But researches and experiences have shown that there is a difference between theory and practice in Ethiopian context. This is to mean that what has been stated in the policy might not be implemented practically due to some reasons. In relation to this topic, many studies have been conducted in different parts of the country at different levels of the schooling. For example, Lemma (2006), in their research findings indicated that the level of utilization of active learning pedagogy was found very poor in some selected primary schools of their studied areas. Moreover, Derebssa (2006) has found out that traditional lecture methods dominated in most of the observed classrooms in primary schools of Ethiopia. Firdissa (2005) and Taye (2008) have indicated in their research findings that teacher-centered did not enhance two way communications in some selected high educational institutions.

The Education and Training Policy highly encourages a paradigm shift from teacher-centred to student-centred approach. Student-centred approach leads to effective teaching learning and promotes the development of students' critical thinking and to engage them in the teaching learning process actively and effectively. With this national context, the Ministry of National Defense needs educated and capable military leaders to play their roles in ensuring national endeavors of rapid economic development, peace, and decentralization process. This becomes true when higher military education prepares students who are well equipped with knowledge, skill and attitude. Mere knowing of facts or principles in their learning may not enable them to perform their intended activities. There fore, students in higher education should be encouraged to focus on "understanding in their learning" and they have to have the ability to apply it in different context at their work place. (MoND 2008:18).

In line with this national context, all teachers at all levels of education are expected to implement active learning approaches. Military education and training approach is more effective if it is supported with practical exercise and on building a learner's experiences and providing learning tasks. The main reason to the ineffectiveness of the practice of active learning in actual class room is suggested by some researchers. For instance, Lue (2000) suggested that there are some constraints which can impede the proper implementation of active learning. Some of the factors

are connected to the midst of the pressure of syllabus, improper class-room organization and management, lack of trained teachers, school directors and problem with students, attitude of teachers etc.

In relation to the above mentioned experience, it is doubtful for the researcher that whether or not the paradigm shift (from teacher-centred to student-centred approach) which has been introduced recently in the teaching learning process is well understood and internalized by the instructors, students and commandants of the academy to make it practical. Thus, this research is intended to bridge this gap of knowledge.

Accordingly, the purpose of this study was to assess extent active learning methods was being implemented, the attitude of instructors, students and commandants, as well as the practices and major problems encountered while active learning method was implemented in the academy.

To this end, the following basic research questions were set.

1. To what extent active learning method is being utilized in the Combined Arms Academy?
2. What are the factors that affect the implementation of active learning?
3. How do instructors and students perceive active-learning?
4. What was the unique practice that promoted the active learning process in the academy?
5. To what extent the objectives of the Ministry of Defense are being implemented in the way of active learning methods at the academy?

1.3. Objectives of the Study

The general objective of this study is to assess the practices of the implementation of the active learning approaches in the Combined Arms Academy.

1.3.1. Specific Objectives

The study will attempt to:

1. Explore the level of utilization of active learning strategies in Combined Arms Academy.
2. Identify the most serious factors that affect the implementation of active learning in the academy
3. Examine instructors and students attitude towards active learning
4. Identify unique practice that promote the active learning in the academy

1.4. Significance of the Study

The research aims at assessing the practices of the implementation of the active learning approaches in the academy. Accordingly, the results of this study may have the following significances.

- May encourage educational experts, and policy makers to be involved in the strengthening of the implementation of active learning in practical circumstances.
- May contribute to improve the CAA teaching methodology
- May inform syllabus designers and module writers to consider active learning in the process of syllabus design and module writing.
- May develop instructors' awareness on the use of active learning.
- Helps the military leaders as additional information sources document for the process of implementation of active learning approaches with the context of higher military college/academy.
- May serve as a supporting document for further study in the area.

1.5. Delimitation of the Study

The scope of this study is delimited to the assessment of the practices of the implementation of active learning methods in Combined Arms Academy in academic year of 2012/13. As to its area coverage, due to shortage of time, the study was confined to one college. To make the study manageable and specific it's content was delimited to the following issues: the extent to which instructors and students utilized active-learning in class-rooms, factors affecting implementation of active learning, attitude of instructors' and students' to wards the active learning, unique practices that promote active learning methods and the extent to which objectives of the Ministry of Defense were being implemented in the way of active learning approaches.

1.6. Limitation of the Study

Unavailability of research paper (written materials) on the topic related to active learning in military (defense) context in the academy; due to shortage of time study focused on only to Combined Arms Academy, the results obtained could not be fully generalized to all Ministry of National Defense colleges and training center in the country. Hence, these were among the factors that have put limitations to the study. Unreserved effort has been made to minimize the effect of the limiting factors.

1.7. Operational Definition of key Terms

Approach: refers to strategy or way that teachers use to teach and students use to learn the teaching-learning process.

Active learning (student-centred): refers to active involvement of the learner on different learning tasks within and out of the classroom. It includes group work, role-playing, discussion, etc

Implementation: is how teaching-learning activity put into practice in/out of the classroom by teachers/instructors in educational institutions.

Teacher-centered Method: the traditional method of teaching in which teachers talk and students listen.

Attitude: the view/feeling of instructors or students on the implementation of active learning.

1.8. Organization of the Paper

The study consist of five chapters; the first chapter contains the introductory part, which provides the basis for the other chapters and it consists of background, statement of the problem, objective of the study, significance, limitation, delimitation, and operational definition of key terms. The Second chapter is review of literature, which focuses on the conceptual and empirical framework of the study; third chapter covers research design and methodology of the study. Chapter four-emphasizes presentation and analysis of the data which is collected from the field; finally the fifth chapter contains summary, conclusion & recommendations.

CHPTER TWO

2. REVIEW OF RELATED LITERATURE

This chapter deals with reviews of the theories of learning, training policy and objectives of Ministry of National Defense, types of instructional approach, teacher-centered versus student-centered (active learning approach), teachers' and students' attitude to wards active learning, teacher's training, teachers roles in active learning methods of instruction and methods of implementing active learning.

2.1. Theories of Learning

Learning is a process of discovery that generates new understanding about ourselves and the world around us (Ransons, et al., 1996). Other psychologists and educators define learning in the way that they perceived the world around them. These different definitions for learning and the process of learning led scholars to develop learning theories. According Bigge and Shermis (2004) A learning theory is a systematic integrated outlook in regard to the nature of their process whereby people relate to their environments in such away to enhance their ability to use both themselves and their environment in a most effective way (p.8).

With these respect different learning theories have been developed starting from early period. Even though many theories are evolving from time to time, in one way or another they are categorized under one of the following major learning theories (Behavioral, cognitive constructivist, humanistic and social learning theory). These major theories are the amalgamation of other many theories, which have relatively similar stance about learning and the occurrence of learning.

For behavioral learning theory, learning is a change in observable behavior, which occurs through stimuli and responses becoming related according to mechanistic principles (Bigge & Shermis, 2004). Behavioral learning theory interprets learning in terms of changes in strength of stimulus- response connection, associations, habits, or behavioral tendencies. With this theory, learning is perceived teachers' desire is to change the observable behaviors of students in a significant way.

In cognitive learning theory, learning is perceived as a process of gaining or changing insights, outlooks, expectations or thought patterns. They define learning in terms of re-organization of perceptual or cognitive fields so as to gain understandings. Here the assumption is that, humans are logical beings who make the choices that make the most sense to them. Pure cognitive theory largely rejects behaviorism on the basis that, behaviorism reduces complex human behavior to simple cause and effect. In this theory the teacher aspires to help students develop their understanding of significant problems and situations.

The constructivist learning theory explains human learning as an active attempt of construct meaning in the world around us. Constructivists believe that learning is more active and self directed than either behaviorism or cognitive theory would postulate. The constructivist stance maintains that learning is a process of construction meaning; it is how people make sense of their experience (Merriam & Caffarella, 1999). Followers of this theory believe learner centric instructional classroom method will strengthen the commitment and involvement of self motivated learners because of their high level of interaction. Having these philosophical outlooks or learning theory, students learning can be influenced by their environments in our case, especially of classroom environment. As Yalew (2004) stated: The views, philosophies, values and conceptions teachers have about the manner in which teaching - learning process should take place determine the nature of instructional methods they chose to present the lessons to their students, the ways they discipline the class, and the type and quality of instructions they make with their students (p.18).

We cannot conclude that all teachers will rely on one theory in their lessons rather they can be flexible in a different situation. What is important here is that, teachers should create an environment which results a maximum learning on the side of students. Based on the available context of the learning environment, students will adopt an approach which enables them to interact and survive the existing situation.

Torp and Sage (2002) defined problem-based Learning (PBL) as "focused, experiential learning (minds-on, hands-on) organized around the investigation and resolution of messy, real-world problems" (p. 15). In PBL, it is the problem begging resolution that is the starting point for

student and teacher efforts, and learning occurs as that problem is examined, researched, discussed, debated, etc., and ultimately, resolved. After wards, instructors assist students in processing relevant concepts, seeking to identify lessons learned and to help students see where material fits in the context of a field, other theories, and so on (McKeachie, 1999). This is the inverse of the more conventional "teach, learn, and apply sequence" (Torp & Sage, 2002, p. 14), in which application exercises are designed (often secondarily) to follow lecture presentations that are the primary means of course content delivery.

PBL matches the desire for discovery and collaboration held by the current "net generation" of learners (Tapscott, 2009, p. 121). Further more; the pedagogical benefits of PBL are compelling. First, PBL can promote lifelong learning and an appreciation for the nuances of complex theoretical material. As a student-oriented pedagogical strategy, PBL empowers learners to understand and integrate theory and practice, while applying and building knowledge in collaborative environments (Sarvey, 2006) skills that can be applied outside the classroom as well as inside. Second, Hmelo Silver (2004) notes that students learn best when presented with problems that do not have a single correct answer; this is a major theme of PBL, as students are empowered as problem solving learners. Third, PBL can help build skills such as critical analysis of complex problems, evaluation and synthesis of material, and effective communication of findings (Duch, Groh, & Allen, 2001). Research has found PBL to be associated with increased ability to apply and retain knowledge (e.g., Dochy, Segers, Van den Bossche, & Gijbels, 2003).

PBL is a recognized pedagogical paradigm, even boasting its own research journal (Interdisciplinary Journal of Problem-Based Learning). It has successfully been applied in disciplines as disparate as chemistry (Williams, Woodward, Symons, & Davies, 2010), marketing (Wee, Kek, & Kelley, 2003), art history (Lindner, 2005) international relations (Burch, 2000), and many others.

2.1.1. The Concept of Adult Learning

The theory of Andragogy contends that adults should be taught differently than children because the learning processes are drastically different (Birzer, 2004; Cartor, 1990; Cross, 1981; Knowles, 1975, 1980, 1984 a, 1984b; Knowles, Holton, & Swanson, 1998). Knowles summarized six key assumptions about adult learners, which are the foundation of adult learning. Those assumptions are as follows:

Self-concept: As a person matures, his/her self-concept moves from one of being a dependent personality towards one of being self-directed. Adults tend to resist situations in which they feel that others are imposing their wills on them.

Experience: As a person matures, he/she accumulates a growing reservoir of experience that becomes a resource for learning. Adults tend to come into adult education with a vast amount of prior experiences compared to that of children. If those prior experiences can be used, they become the richest resource available.

Readiness to learn: As a person matures, his/her readiness to learn becomes oriented to the development task of his/her social roles. Readiness to learn is dependent on an appreciation of the relevancy of the topic to the student.

Orientation to learn: As a person matures, his/her time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly his/her orientation towards learning shifts from one of subject centeredness to one of problem-centeredness. Adults are motivated to learn to the extent in which they perceive that the knowledge in which they are acquiring will help them perform a task or solve a problem that they may be facing in real life.

Motivation to learn: Internal motivation is key as a person matures. Although adults feel the pressure of external events, they are mostly driven by internal motivation and the desire for self esteem and goal attainment.

The need to know: Adults need to know the reason for learning something. In adult learning, the first task of the teacher is to help the learner become aware of the need to know. When adults undertake learning something they deem valuable, they will invest a considerable amount of

resources (e.g., time and energy). (Forrest III & Peterson, 2006; Kidd, 1973; Knowles, 1984a, 1984b; Knowles et al., 1998; Lindeman, 1926; Ozuah, 2005; Thompson & Deis, 2004)

Knowles lists these six assumptions with the understanding that adults will have more experiences than children and have created pre established beliefs. Experience is the most important as adults are focusing more on the process rather than the content being taught.

Bring wealth experience to the learning environment – should be used as a resource. Expect to have a high degree of influence on what they are to be educated for, and how they are to be educated.

Andragogy is: student-centered, experience-based, problem-oriented and collaborative very much in the spirit of the humanist approach to learning and education.

2.1.2. Teaching and Learning in Higher Education

Chickering and Gamson (1987) argued that the criteria of good teaching and learning in higher education as follows:

2.1.2.1. Good Practice of Teaching

Encourages Student-Instructor contact

Frequent student instructor contact in and out of the class is an important factor in student motivation and involvement. Instructor concern helps students to get through rough times and keep on working. Knowing a few instructors will enhance students' intelectual commitement and encourages them to think about their own values and future plans.

Encourages Cooperation among Students

Learning is enhanced when it is more like a team effort than a solo race. Good teaching like good work, is collaborative and social, not competative and isolated. Working with others often increases involvement in learning. Sharing once own ideas and responding to others reactions improves thinking and deepens understanding.

Encourages Active Learning

Students do not learn much just sitting in class listening to instructors, memorizing assignments and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of

themselves. Goldenberg in Yalew (2004) posited that "when learning gives students the chance to actively engage in the process and when teachers allow them to see the relation between what they know and experienced, it encourage the developmenmt of creativity, inquisitiveness and motivated learning" (p.19).

Gives Prompt Feedback

Students need appropriate feedback on performance to benefit from courses. In getting started, students need help in assessing existing knowledge and competence. In class, students need frequent opportunities to perform and receive suggestion for improvement. At various points during college, and at the end, students need chances to reflect on what they have learned, what they still need to know, and how to assess themselves.

Emphasizes Time on Task

Learning to use one's time well is critical for students and professionals a like. Students need help in learning effective time management. Allocating realistic amounts of time means effective learning for students and effective teaching for instructors.

Communicates High Expectations

High expectations are important for every one for the poorly prepared, for those unwilling to exert themselves, and the bright and well motivated. Expecting students to perform well becomes a self fulfilling prophecy when instructors hold high expectations for themselves and make extra efforts.

Respects diverse Talents and ways of Learning

People bring differente talents and styles of learning to universities. Students need the opportunities to show their talents and learn in ways that work for them. According to MoE as cited in Firdissa (2005) stated 'since the same method does not work for every student, HEI teachers should be able to use a variety of teaching methods, so as to address the individual needs and preferences of the students they teach' (p.50).

Linking Assessment with Teaching and Learning

This is another important point which the researcher believes in contemporary higher education as one criterion for effective teaching. Falchikov (2005) said "for learning to be integrative and lasting the educacional system must be coherente, connecting teaching, learning and assessment" (p.55). According to Stiggins (2004) stated "... if it is used with skill, assessment can motívate the unmotivated, restore the desire to learn and encourage students to keep learning and it can actually create- not simply measure increased achievement" (p.40). This shows that assessment is an ingrediente to link or reinforce teaching with students learning.

The paradigmatic shift from teaching to learning in contemporary higher education, took the role of assessment for improving the teaching learning process rather than mere measuring of students achievement and grading. Currently 'assessment for learning' is becoming more popular than 'assessment of learning' in theoretical aspect. Therefore assessment play a paramount role in improving teachers'way of teaching which can in turn influences students learning approach. The more you can bring teaching, learning and assessment together, the more successful you and your students will become in knowing how and to what extent meaningful progress is being made (Ellis, 2001).

2.1.3. Learning in Higher Education

'Learning is about how we perceive and understand the world, about making meaning' (Marton in Fry et al., 2003,p.9).fry and his collagues(2003) elaborated this idea as learning might involve mastering abstract priciplies, understanding proofs, remembering factual information, acquiring methods, techniques and approches , recognition, reasoning, debating ideas, or developing behavior appropriate to specific situations. Of course all these points mentioned by Fry characterize all educational institutions including higher education. Currently, the nation of learning as understanding the concept of course content is becoming an issue than learning as quantitative increase in knowledge. As Biggs (1996) posited:

There is a need for education today to move away from an emphasis up on teaching towards a perspective which emphasizes learning. This orientation, often referred to as 'learner centeredness' provides a conceptual framework for describing how a learner defines his or her world of learning and comes to terms with it by engaging in the process of learning he or she finds relevant to personal goals and interests.

Barr and Tagg (1995) are the most figured scholars in this area. In their discussion of paradigmatic shift from instruction to learning. They elaborated the difference between the two paradigms with differente aspect. In instructional paradigm the chief agent in the process is the teacher who delivers knowledge; students are viewed as passive vessels, ingesting knowledge for recall on tests. "learning is presumed to be cumulative because it amounts to ingesting more and more chunks"(Tagg & Barr,1995).

On the other hand, the learning paradigm frames learning holistically, recognizing that the chief agent in the learner. Thus, students must be active discoverers and constructors of their own knowledge. In this paradigm, knowledge consists of frameworks or wholes that are created or constructed by the learner, according to Barr and Tagg (1995) in learning paradigm knowledge is not seen as cumulative and linear, like a wall of bricks, but as a nesting and interacting of frameworks...learning is revealed when those frameworks are used to understand and act. This shift of paradigms now a day in HE from teaching to learning is getting acceptance from many scholars including Ethiopians. Teachers knowingly or unknowingly conceive and/or preach as learner centered approach is more preferable than teacher centered approach, however; their practice may not be inline with their conception/belief.

David in Hartley et al. (2005) viewed effective learning as it is essentially a holistic process that integrates knowing and doing in a critically reflective way and moreover, that work based learning (WBL) is a sound facilitator of this quality. Therefore, all this findings portray for effective learning to takes place, the learner must participate actively and teachers must use techniques which provide an opportunuty for students to participate. Learning in higher education should emphasis more on 'higher level' conceptions such as learning as applying, abstracting meaning or understanding reality, rather than emphasizing on quantitative increase in knowledge (Kember, 1996. Firdissa (2005) also posited that "what ever the case, learning takes place more reality and effectively, when a number of the human faculities are brought in to the action" (p.51).

2.2. Training policy and objectives of Ministry of National Defense

Training policy and of structure of MoND that expects from learners after graduation could be categorized in to three main domains; their specialization, their general knowledge and specific knowledge; specialization denotes what exactly officers do in their daily duties and general knowledge (of politics, culture etc) notes that what they have to practice and develop the body of knowledge and support policy makers through acquired skills researching, economic, political, social and cultural issues; whereas specific knowledge that need to be acquired means, according to the document, it is the national, other country's, regional and international rule of engagements, polices laws that the military to respect.

The first is the 2004 defense training main department (DTMD), training policy description that the military training goals is to expand training centers and focus on training activities for reducing the nation's vulnerability. The training in all centers, according to this policy, is that MoND will focus on joint operation skills and knowledge development, strategic operational management education in addition to other course. This policy also describes the purpose of preparing policy document that is will give autonomous authority to ground and air force to apply their own way of training for specific units tasks as they believe to be, however, with in conformity to the policy guidance.

Second, the 2006 training organization and structure of training document description explanation colleges' responsibility to achieve MoND'S strategic goals through education and training.

The third document, given the five years-term strategy of defense university college (DUC) prepared in 2007, all colleges, including CAA have been given the mandates to improve curriculum, their way of governance, and management and leadership preferences as these colleges are knowledgeable to their situation than their superior leaders about that particular college situation.

Educational Strategies of the Combined Arms Academy (CAA)

The CAA implements the following educational strategies to achieve the objectives of Ministry of National Defense

1. Create democratic and conducive class rooms and learning environment
2. Ensure the relevance, quality and modernity of the education towards the contemporary intent of MoND and the dynamism of technology.
3. Integrate the professional education with the knowledge of federalism (constitution) and political build-up of officer students
4. Motivate research and publication by aligning the academic performance, promotion and awards with research undertakings in accordance with appropriate rules and regulations
5. Promote student centered teaching-learning process and encourage self learning approaches
6. Develop unwavering but flexible education flow-chart and system and tool of assuring the quality of education
7. Enhance the teaching and learning capacity of the Academy using different methods like workshops, short trainings, domestic and foreign further education, etc

2.2.1. Higher Military Education in Ministry of National Defense and its Purposes

The purpose of Ministry of National Defense military capacity building through college graduate education fosters the national interest following the strategic policy directions and guidance issued. In addition, those colleges have been playing their role in producing competent and loyal officers and professionals needed by the institutional mission (DUC, 2007). The Ethiopian Government National Foreign and security policy issued in 2002 stated three major policy directions. This policy document out lined three base lines how the national security policy has been focused and including the strategies for its implementation the main purpose of this policy strategy has out lined the three goal points below, and in that, the military would play its role in fostering the policy implementation (MOI, 2002). These three points are presented as follows:

The need to Rapid National Economic Development and the building of democratization process and thus democracy as a primary source of the policy:

That is assurance of national integrity. Ethiopia's Basic national interest is the need to rapid development of the nation in reducing poverty, disease and backwardness and that should benefit to citizen equally. Besides Building the Democratic institutions, issuing the affairs of rights and good governance are instruments that can create the peaceful situations where the public can achieve its objectives peacefully.

The need to National integrity and Honor: Poverty and backwardness; lack of good governance and democracy; are causes of vulnerability or dangers that are obstacle to creating a sense of mutual respect among citizens, unity and strength for national development consensus. Therefore, the policy goal is to avoid these national integrity threats to ensuring national security, development and peace.

Globalization as the source of the policy: Economic security, food security, human security, peace and stability have come to be the global issues that need international partnership and cooperation with the world. Therefore, this policy framework underlined the main implementing strategies to ensuring the above three baseline sources of security policy aimed to tackle problems of internal and external security threats, which are obstacle to Ethiopia's development.

The process in the military higher education is generally guided by accepted civilian accreditation standards and practices tailored to the needs of Joint Professional Military Education (JPME). Colleges/schools teaching Joint Professional Military Education (JPME) differ from civilian universities in at least two significant ways:

- Underlying Theme of the Subject Matter: Joint Professional Military Education (JPME) addresses the diplomatic, economic, military and informational dimensions of national security, with special emphasis on planning and conducting activities throughout the range of military operations.
- Learning Environment: Colleges/schools conducting Joint Professional Military Education (JPME) bring together a faculty and student body of professional military officers and civilian government officials who have significant experience in the major disciplines taught at the colleges. In addition, these colleges/schools have access to and use classified

information and war gaming facilities not available to civilian universities. (United State National Military Strategy [USNMS], 2004).

The above three points are linked to the required skill and ability to obtained in the process of military training and education. Since the military mission accomplishments is an instrument of peace and security of the nation, either its participation in domestic and international scene, it is part of the national policy interest that the military is to contribute to the economy. Thus, implementation strategies of the security policy outlined as blow;

a). To focused on from inside strategy rather than out side strategy policy, that concept implied that, the use of all the potential or competative of the country in the first place, economic, political, social and cultural resource must be formulated and implemented first from inside, then foreign request for assistance, if need be, would be in terms of technical and financial assistance in a way to reducing the threats that may come from abroad in any sort of the assistance situations that may cause to vulnerability of nation.

b). To focus on human resource capacity building in general, and the national defense force in particular. In fact, diplomatic and intelligence of the country are primary instruments for nation security. However, issue of military capacity has received consolidations, for it is an instrument of political and diplomatic achievements. Its purpose of the military is "deterrence" use of military forces will be an option for securing the nation if peaceful means are failed. On bases of national security policy, the defense training main department (DTMD) has designed training policy and strategy intent (MoND, 2006). Moreover DUC plan describe its objectives in line with the mission, vision and values of MoND (DUC, 2006).

The MoND has expanded the number of higher educations institution through time. At this time of research writing, there are five tactical and technical military colleges at degree level.

The CAA is one of the colleges that have been established in 2007, under the supervision of DTMD. What the implication of the security policy and implementation strategies on military purpose are considered:

1. Possible answer: the military is in the practice and theory responsible for any threats against Ethiopia. The use of military force is another force of political diplomacy leverages.

2. Defense mission as well observed today, and according to the policy defined, impacted by the nation of security as a global issue and strategy that the military capacity situation is also part of it.
3. In order to ensure international and domestic security problems the military force should be trained, but should be done in country because it reduce the cost of foreign education.

2.3. Types of Instructional Approach

Methods of teaching can be classified as traditional and modern methods depending on their nature of involvements of students and teachers, the aim of education process, their recentness. In line with this, Capel, et.al, (1995) supplemented that the classification of methods as direct (teacher centered, traditional, formal, expository, didactic, authoritarian etc) or indirect (student-centered, democratic, active, informal, repressive etc) would be made on the basis of source of the knowledge, role of the teacher, role of the students and mechanism of evaluation Finally, despite the variation in the names, it is witnessed that these terms have common features for their classifications. It is therefore, worth mentioning that these terms are implied by the terms Teacher Centered Vs Learner _Centered (active learning) methods in this study.

2.3.1. Teacher- Centered Approach

This approach gives the priority role and responsibility to the teacher. The teacher is considered as the center of classroom activity, and is thought to hold most of the knowledge necessary for the students to be successful. (ICDR, 1999, Frazel et.al, 1995, Mutassa and Wills, 1995, Eggen and Kauchax, 1996). The information to be learned is given to the learners in a completed form instead of letting the learners to interact with. Similarly, Eggen and Kauchax (1996:180) described teacher- centered approach as follows: Teacher-centered instruction refers to academically focused, teacher- directed classroom using sequenced and structured materials. It refers to teaching activities where goals are clear to students, time allocated for instruction is sufficient and continuous, coverage of content is extensive, the performance of students is monitored, and feedback to the student is immediate and academically oriented. Moreover, the

teacher plays a primary role in structuring content, explaining it, and using examples to increase students' understanding.

In line with this idea, Borich (1984) argued that in this approach the teacher acts as the director of learning and the assumption is made that the teacher knows best. Teaching takes a predominant role over learning. In deed, students are assumed to be "Empty Vessels" that have to be filled by the teacher (Plass, 1998; Lue, 2000). In this case, the teacher will do most of the talking and it is the students' duty to listen to what the teacher has to say, memorize and repeat it during reaction period or in examination papers (Eggen and Kauchax 1996:179).

According to ICDR (1999:68), in this mode of teaching, the teacher uses "chalk and talk" or other methods of teaching in which he/she is active and students stay passive. The teacher either writes notes on the board, which the students passively copy in their exercise books, or memorize the information from their textbooks. Frazee et al (1995:205) explained that skills are taught by the teachers' telling, describing, demonstrating and explaining the desired technique step by step in their attempt to master the techniques via drills, practice and recitation. Macharia and Waria (1994:39) have summarized some essential characteristics of the teacher- centered approach as follows:

- The teacher is more active than the students
- The teacher is active in explaining, monitoring and describing.
- The learners listen passively while the teacher 'pours knowledge in to them'
- The desks are arranged in straight rows.
- The main activity of the learners is listening and perhaps copying notes from the chalkboard.
- There is usually no group work.

Scholars like Calahan (1992) and Plass (1998) have enumerated the outcomes of direct instruction as follows: most students do learn how to conform, obey and follow directions, but they are less likely to learn how to apply classroom skills to the problems of daily life they encounter out side the classroom. Therefore, teacher- oriented methodology is the rigid, stereotyped patterns of behavior instead of flexible patterns that can be applied to a variety of life situations. To sum up, such arguments seem to be sufficiently convincing that in the teacher-

centered classrooms, learners are the passive receivers of knowledge. Teachers and texts are sources of authority. Lecture format dominates, and students learn in a rote fashion, reproducing the subject matter in set exercise, and in examinations. Moreover, the emphasis is on theory rather than on practice and the successful student is the one who can display his knowledge of facts that has been fed in to him/her.

2.3.2. Student-centered (Active Learning Approach)

This part deals with some of the Philosophical and Theoretical foundations of active-learning, features and advantages of active learning in the teaching- learning process.

2.3.2.1. Philosophical and Theoretical Foundations of Active-Learning Methods

Active-learning pedagogies are celebrated by national governments and international organizations in part because they are believed to enhance learning and to lead directly to improved educational outcomes (e.g., cognitive achievement, retention, attainment) as well as indirectly to enhanced economic development (resulting from more capable workers and consumers). Additionally, active-learning pedagogies are valued because they are perceived to better prepare future citizens to effectively participate in democratic polity at local, national, and global levels (Torney-Purta, 1999). For instance, Spring (2006) argues that formalistic forms of education are often used to prepare students to accept and fit into existing systems while progressive forms of education (i.e active-learning methods) are considered a means for preparing students to actively influence the direction of political and social systems. Additionally, de Baessa et al., (2002) report, based on a study of classrooms attended by children during their first three years of schooling in rural Guatemala, that "use of student-directed small groups is related to the occurrence of democratic behaviors(i.e. taking turns, helping others, expressing opinions) among children of different cultures and genders, although several of the hypothesized behaviors as participation in student government and choosing among viable alternatives were observed infrequently.

However, Alexander (2008) explains that there is (only limited) consensus on what 'quality' actually entails, especially when we move from the conditions for quality (infrastructure, resources, teacher supply and of course access, enrolment and retention) to the pedagogy through which educational quality is most directly mediated. Moreover, he indicates that claims about the

impact of different pedagogical approaches, such as "'teacher-centered' vs. 'student-centered', are rarely discussed, let alone evaluated against hard evidence, with the result that they rapidly acquire the status of unarguable pedagogical truth and become transmuted into policy (Alexander, 2008).

Guthrie (1990) notes, moreover, that although, the schools of lesser-developed countries are littered with remnants of attempts to change the quality of teaching based on Western philosophies of education that denigrate the formalistic teaching, such formalistic teaching is desirable and effective in many educational and cultural contexts. Furthermore, noting the paradox that rote learning tends to be more dominant in Asian than Western schools, but students in Asian countries tend to outperform their Western country peers on international achievement tests, Watkins (2007) calls our attention to cultural differences in the perception of the relationship between memorizing and understanding, commenting that Asian students frequently learn repetitively, both to ensure retention and to enhance understanding. Thus, there is some, albeit contradictory research evidence on the impact of active-learning versus rote memory-oriented pedagogies (see discussion below).

Nevertheless, it seems that many of the arguments for active-learning, student-centered pedagogy are grounded more in philosophy and educational theory than they are warranted by empirical evidence. Thus, it is important to review briefly here the long history of philosophical and theoretical debates about the best way to approach instruction.

Active-learning (or student-centered) pedagogies represent a model of teaching that highlights "minimal teacher lecturing or direct transmission of factual knowledge, multiple small group activities that engage students in discovery learning or problem solving, and frequent student questions and discussion (Leu and Price-Rom 2006)" .On student-centered instruction, Cuban, 1984). Active-learning" pedagogies can be contrasted with "formal" or "direct instruction" approaches emphasizing teacher lecturing or direct transmission of factual knowledge, coupled with "recitation and drill" (Spring, 2006).

In this regard, we can identify both behavioral and cognitive dimensions on which active learning; student-centered pedagogies can be contrasted with formal or direct instruction (Barrow et al., 2007; Ginsburg, 2006; Mayer, 2004). The behavioral dimension of active-learning pedagogies focuses on the degree to which instructional practices enable students to engage in verbal or physical behavior, while the cognitive dimension highlights the degree to which teaching strategies enable students to engage in various forms/levels of thinking. Thus, we can identify different philosophical and theoretical notions that have contributed to how the differences between these pedagogical are framed.

The behavioral dimension is perhaps most frequently traced to American philosopher/educator, John Dewey (1859-1952), who developed a pragmatist philosophy, popularized "progressive" or "experiential" education, and promoted learning by experimentation and practice, that is, learning by doing (Dewey, 1938). However, one can also trace a concern for (especially verbal) behavior in learning to: a) Confucius (551-479 BC), who argued for "individualized instruction through discussion;" b) Socrates (470-399 BC), who emphasized involving individual learners "in a philosophic dialogues;" c) Johann Heinrich Pestalozzi (1746-1827), who encouraged "firsthand experience in learning environments;" and d) Friedrich Froebel (1782-1852), who argued for learning via "free self-activity which allows for active creativity and social participation" (Treat et al., 2008). Furthermore, we should note the more recent theoretical contribution of scholars and educators associated with the Humanist Movement, for example, Rogers (1969), who argued that much significant learning is acquired by doing and that learning is facilitated when the student is a responsible participant."

The cognitive dimension is generally traced to the work of the French psychologist, Jean Piaget (1896-1980), who "suggested that, through processes of accommodation and assimilation, individuals construct new knowledge from their experiences" (Wikipedia, 2008; see also Piaget, 1969). Another source of influence is the work of Lev Vygotsky (1896-1934), whose writings focused on "the relationship between language and thinking" (as well as "the roles of historical, cultural, and social factors in cognition" (Wikipedia, 2008, Vygotsky, 1962). Moreover, although qur'anic schools have tended to emphasize rote learning and memorization (Boyle, 2006; Spring 2006), alternative pedagogical traditions associated with Islamic scholars stress students' active

cognitive role in learning. For example, al-Jahiz (776-868) promoted using "deductive reasoning" as well as "memorization" and Abu Nasr al-Farabi (870-950) encouraged "instruction that ensures that both teacher and student participate actively in the process, allowing the instruction to be student-centered! (Gunther, 2006). Finally, a more contemporary cognitive psychologist of education, Merl Wittrock (1979), explains that learners have active roles in learning.

They are not passive consumers of information. Even when learners are given the information they are to learn, they still must discover meaning. Finally, Alexander (2008), references several studies (e.g. Alexander, 2001; Edwards and Westgate, 1994; Moyles et al., 2003; Nystrand et al., 1997; Smith et al., 2004) to document that three kinds of "teaching talk" (rote/drilling, recitation, and exposition) are most "recurrent" among teachers internationally, while citing various investigations (Alexander, 2006; Barnes and Todd, 1995; Mercer, 2000) to claim that other forms of pedagogical interaction (discussion and dialogue) have greater power to provoke cognitive engagement and understanding.

2.3.2.2. Features and advantages of Active Learning

Active learning is an instructional strategy in which students construct meaning, often working in collaboration with other students. In this strategy, knowledge is directly experienced, constructed, acted up on or revised by the learners. So, it is a multi-directional learning experience in which learning occurs in a teacher to student, student to teacher, and student to student manner (Morable, 2000:49).

People use with very different meanings and assumptions about the nature of learning and the aims and purposes of learning. Briefly active learning is "knowing how' as well as 'knowing what" (MoE, 2003/04) It implies learner participation, involvement, thinking and doing what they think, and sharing responsibilities for their learning rather than passively absorbing the supposedly rich contents provided by their teachers. Moreover, according to Bonwell and Eison (2003:38), active learning is a process where by learners are actively engaged in the learning process, rather than 'passively' absorbing lectures. Based on this, one can tell how teachers and

students are viewed, what classroom participation looks like and how knowledge is gained in active learning method.

Prince (2004:1) defined active learning as any instructional method that engages students in the learning process. It requires students to do meaningful learning activities and think about what they are doing. The core elements of active learning are student activity and engagement in the learning process. Supporting this, Biadgelign (2010:153) have noted that active learning methods give much chance to the student regardless of the size of students involved in the learning session.

In this method, learners are actively involved in their learning. Therefore, they are not considered as "blank slate". It is rather believed that they are responsible and can play active role in their own learning. That is why Felder in http://www.honolulu. Hawil; Edu/intrant/ teachtip. Htm (2000) states that "teacher-centered instructional methods have repeatedly been found inferior to instruction that involves active learning... in which students work in teams on problems and projects under conditions that assure both positive interdependence and individual accountability." Temechegn (2002) has also remarked that learner- centered method capitalizes on individual difference. It recognizes the different learning styles of students, which also demands the implementation of various active learning strategies.

According to Bonwell and Eison (2003:106) students must do more than just listen. They must read, write, discuss or be engaged in solving problems. Most important, to be actively involved, students must engage in such higher order thinking tasks as analysis, synthesis and evaluation. In this method, therefore, learning by doing is emphasized which leads to students learning. This may show that students' learning depends on what they do. In general most learning is not the result of interaction. It is rather the result of unhampered participation in a meaningful setting. Most people learn by being with it Illich (1998:94) in Temechegn (2003:32)

Aggarwal,(1996). Sources of information and facts from their teachers or their textbooks, they are asked to do something active and creative with the information analyze it, think about it, and make reports on it. Similarly, Sguazzin and Graan (1998:57) explained that active-learning is a social process and the emphasis in this process is on collaboration and the exchanging of ideas.

experiences, values and attitudes. It is a negotiated process where our understanding expands through interaction and active engagement with others. This is to say that the emphasis in viewing knowledge as something "out there". Positivist idea has shifted to the view of constructing knowledge (Frazee, et al, 1995:26).Thus the emphasis in teaching has shifted from transmission of "facts" or information to teaching learners how to learn, how to find information for themselves etc. Here learners are placed in the center of the learning process (Lue, 2000:4). In relation to this idea Brophy (1992:69) as cited in Eggen and Kauchax 1996:83) puts the learner at the center of the learning process by stating:

> *Current research focuses on the role of the students. It recognizes that students do not passively receive or copy information from the teacher. Instead actively mediate trying to make sense of it and to relate it to what they already know abut the topic. Thus, students develop new knowledge through a process of active construction.*

In line with this, Plass (1998:310) has explained that in learner- centered classroom students are actively involved in the learning process, and their prior knowledge and experience is integral part of that process.

They are encouraged to articulate their ideas and opinions. The teacher creates opportunities for learning and encourages learner's autonomy. Lue (2000:11) and Plass (1998:312) stated that in active learning, previous knowledge and experiences are so crucial and valued since they help to construct new knowledge. The role of the teacher is creating conducive environment for learning and offering guide, stage setting, facilitating, observing and evaluating his/her students in a more objective way. In other words, the teacher, as a facilitator and co-worker, is not expected to give information only, but he is also expected to design instructions that would lead students learning for understanding through debating, interrogating, discussing, creating and explaining.

From this one can understand that, in active learning, the teacher has a facilitative role. The facilitative teacher plans fun, interactive learning activities; shares information and then lets participants practice what they have learned; encourages questions and discussion; and motivates participants by helping them understand how they can use what they have learned. According to Biadgelign (2010:153), active learning methods include inquiry, discovery, and laboratory methods.

Table 1: Summary of Teacher-centered Vs Student-centered (Active learning)

Teacher-centered	Learner –centered
Transfer as much information as possible	Learning for understanding
Facts presented by teacher	Knowledge (often generated by students) skills, attitudes
Lecture , teacher demonstration	Participatory, group discussion and projects,
Passive recipients of teachers information	Active participation in their own
Terminal , passing to next level	Continuous, feedback on teaching and learning
Rote –learning	Critical thinking, reasoning, reflection and action
Syllabus is content-based and broken down in to subjects	An integration of knowledge, learning relevant and connected to real-life situations
Text book/work sheet bound and teacher-centered	Learner-centered; teachers are facilitators; teacher constantly uses group work and team work to consolidate the new approach
Syllabus is rigid and non-negotiable	Learning programs seen as guides that follow teachers to be innovative in designing programs
Teachers are responsible for learning; motivation depends of responsibility of teacher	Learners take responsibility for their learning; pupils motivated by constant feedback and affirmation of their worth
Emphasis on what the teacher hopes to achieve	Emphasis on outcomes-what the learners becomes and understands
Content placed in to rigid time-frames	Flexible time frames to allow learners to work at their own pace
Curriculum development process not open to public comment	Comment and out put from the wider community is encouraged

Source; Newman 1999, cited in Mehari Yimulaw (2007)

2.4. Teachers' and Students' Attitude to wards Active Learning

For effective implementation of any new perspective, including active learning, positive attitude to the issues and sound knowledge and skills in the area are very important. Particularly, the underlying ideas, concepts, merits and demerits of the new approach should clearly be understood by teachers and students. In this review the knowledge and attitudes of teachers and students will be seen.

Teachers' Attitudes: It is critical that teachers/ instructors have a thorough understanding of the nature and characteristics of the appropriate teaching- learning methods to be used in conjunction with curricular materials. Because, although to a certain extent some decisions may be determined for teachers/ instructors by official syllabus, students' textbooks or teachers' guide, it is the teacher/ instructor who are the ultimate implementer of the curricular materials (ICDR, 1999:60). But, unfortunately some teachers discourage active learning with the ground that it brings an extra demand in the planning and preparation of lessons. Some teachers feel as it is bounded by over crowded subject matter and thus pressurized by the limited time they have to teach.

The belief persists that active learning takes too much time and thus covering the portion is difficult or impossible. Even, they come to the conclusion that active learning may be nice in theory but unrealistic in practice. These all show that there have been no enough and concrete perception about how to install active learning in classroom, which may lead to negative reactions Capel et al (1995:229-30). These misconceptions show that teachers have not understood as active learning enables them to spend more time with groups and individuals to give access to special needs of students and contribute to a better and quality learning.

Students' Attitude: Authors like Dary and Terry; (1993:88) have stressed the importance of students' past experience, which is a transformative rather than passive accumulation of knowledge. They notice that unless learners consider the implication of the ideas there in their own lives and decide to act, know and believe in the ways; they are likely to adopt a passive acquiescence to the teachers' knowledge structure. And ultimately, this passive students'

learning has not made a difference because, it has not been transformative and at best resulted in some accretion of knowledge.

Thus, it is possible to suggest that active learning seeks the emancipation of learners from the old belief that has dominated methods of teaching over the last century. However, in spite of all the contributions of active learning discussed earlier, the students may not have appropriate perception and may have developed negative attitudes for various reasons. For example, students may look shy and uncooperative at the beginning of active learning. Because, they are accustomed to the traditional instructional method where they are expected to listen attentively and try to memorize what have been learned for the purpose of examination. This discloses that learners are not trying and/or have no access to use their prior experience. They do not challenge their old assumption or they do not create new meaning or perspectives that are more inclusive, integrative and open to alternative views, which can emancipate them from strong belief on stimulus response mechanisms. (Dary and Terry, 1993:93)

2.5. Teacher's training

Frazee et al. (1995:80) states that the training of teachers is a crucial factor among other factors that affect the implementation of active learning. Because the teacher is the final decision maker as regard to the actual learning opportunities provided to the students. The best designed curriculum as well as the poorest owes the ultimate success or failure to the quality of the teachers' planning and implementation. In other words, what Frazee et.al wants to say is, if teachers lack knowledge of the teaching (active learning) method which requires new roles and commitment, implementation will be seriously hampered. Hence, provision of in-service teacher training is essential to acquaint teacher trainers with new teaching-learning methodologies, which are learner oriented (active learning).

If the expectation that learners should be the agents of change is taken seriously; the capacities this work requires of them be considered carefully, current practice; pre- service and in- service teacher education be examined critically and ways to enhance teachers' learning across their careers should be explored more. (Mukalel, et al, 1999:301). In line with this idea the Education and Training Policy of Ethiopia emphasizes new pre-service training packages which are

strongly practice-oriented at all levels of training, so that graduating teachers attain the necessary skills and a positive attitude in the application of variety of methods (ICDR, 1998: 40)

In general, even though, the policy advocates active learning, there is a gap between theory and practice. Thus, teacher education needs to model class room teaching skills and methods that reflect and go in line with the Education and Training Policy.

2.6. Teachers Roles in Active Learning Methods of instruction

Eggen (1996:25) states that historically our great teachers learned both 'HOW' and 'WHAT' to teach from their own teachers. The critical content of any learning experience is the method or process through which the learning occurs. What is that students do in the classroom? They sit and listen to the teacher. Mostly they are required to make observation, formulate definition or perform any intellectual operation that go beyond repeating what some one else says is true. This is the case in the teacher-centered instructional approach.

In moving towards constructive approach (active learning) to teaching, Chikering and Gamson (1997:91) say that teachers will need to attend to their own conceptual change at least as much they attend to this process in their schools. If our schools are to provide experience for students that fire their sprits identify their nature and capacities as learners and enable them to be independent thinkers, then teachers should support students. Thus supporting students to be powerful in developing their skills and capacities is the most important practice of teachers in active learning.

What are essentially involved in active learning are the activities that are used in the process of learning. Many educators have strictly underlined that teachers play crucial role in the implementation of these activities.

In this connection, Lue, (2000:5) has stated that teachers' practice in active learning is to use classroom methods that encourage the students to be as active as possible by analyzing and interpreting knowledge through the use of higher order thinking skills, active learning, problem solving and communication based methods in their teaching. Moreover, in active learning classroom, we want the teachers to offer their students options and choices in their work. In

addition, teachers should reject the common practices of telling students what to do, rather engage their students in their interest and invite them to participate in activities that allow them to be involved in decisions about their learning. Students' active involvement in their own learning is a vital reality in active learning classroom.

In addition, in active learning classroom, the teacher has to structure the classroom so that students and teachers can share the control of their environment. Students are directly involved in all matters that occur in the classroom that affect their being there as learners and as people.
To sum up, the effective implementation of active learning is one of the basic criteria to be an effective teacher. If teachers are in a position to help students to learn, they must be able to select and use teaching strategies that produce learning.

2.7. Instructional materials

The important of teaching and learning materials can not over emphasize, it is clear than the point of a teacher as well as of the learner that effective teaching and learning can not take place with out them. Namasthaka et al (2000) explain the advantage of instructional materials as follows,

> *Teaching and learning materials helps the teacher to explain abstract ideas motivate learners, arouse there interest and develop psychomotor skills. In the end, learners cultivate in the subject, develop various skills and get an understanding of concepts. As a result active- learning requires text books, library books, wall charts, note books, maps and if possible computers and net work connections (p 98).*

As Dale (1969) is cited in Amare (1995) instructional materials has the following pedagogical use:1) Facilitate active-learning 2) Encourage creative thinking 3) Effective students' skill development 4) Over come the limitation of time and place 5) Concretize abstract experience 6) create the access to the invisible reliable 7) Teach and entertain 8) Related theory with practice 9) Make learning more functional by increasing retention 10) Assist learning of a method of learning in the field 11) Encourage responsibility (p.55)

Thought the instructional materials have these advantageous, selection of inappropriate materials may lead to the redundant directions. There fore, to minimize such problem the teacher must be consider different variables. On the issue of this, Firdissa (2005) suggested that selection of a right instructional method for a particular lesson depends on many things. Among them are "the age and developmental level of the students, what the students already know, and what they need to know to succeed in the lesson. The subject matter content, the lesson-situation, the objective of the lesson; the available people, time space, and material resources, and the physical setting also need to be considered "(p 55).

To this effect, to prepare sufficient instructional materials, it is quite evident that the school should be display financial support. Based on the above facts the active learning methods of teaching can be highly affected or facilitated by the shortage or availability of instructional materials. Thus instructional materials are one of the most important factors that challenge the application of active-learning method.

2.8. Methods of Implementing Active Learning

To be effective, in the teaching-learning process, teachers should use different active learning methods. Because current thinking and practice in education highly advocates the need to actively involve the learner in their learning. There are lots of strategies that help to implement active learning in the classrooms. However, only some of the commonly used are the following.

Problem Solving Method

Problem solving method is an instructional technique where teachers and learners attempt in a conscious, planned and purposeful effort to arrive at some solution (Aggarwal 1996:91). Learning; through problem solving focuses on activities that are relevant and useful to the life of the learner than just learning by memorizing facts that may have no connection with the learners' life. According to Lue, (2000:22) problem base learning is derived from the conviction that the learner is an active and creative individual with the will and ability to seek knowledge and self development. The method allows learners to demonstrate and develop a wide range of skills and personal qualities. which include the ability to show initiative, to take responsibility and plan, to solve problem, to make decisions and communicate effectively. It is a highly active and participatory method, which gives opportunity for involvement.

Problem solving according to Robert Gagne 1968 is the highest form of learning. For him forms of learning in their ascending order run as: concept of learning....problem solving. Problem solving as a most effective of all instructional strategies, is mostly directed at organizing knowledge with a view of explaining cause and effect relationships. Its major aims are to help students develop the cognitive skills necessary for locating data, processing them in the light of the problem being investigated through the application of the local reasoning, hypothesizing, inferring and testing the hypothesis. Stages of Problem Solving Approach: Recognition and formulation of the problem, formulating the hypothesis, collecting, organizing and analyzing the data, drawing conclusion on the basis of finding, solving the problem by applying the finding.

Role- Playing

It is the powerful, learner-centered method of instruction, which can be used, for developing or changing learners feeling and attitude. Role- playing is a deliberate acting of a social role in a class room. During role-playing a small number of students present the content while others in the class observe. Students have the opportunity, to experience and analyze the specific situation being studied (Frazee, et al 1995:115). Role- playing fosters small group interactions. It allows students the opportunity to act out collected text.

Group Discussion

Discussion in the classroom is an important kind of active learning strategy (ICDR, 1999:92). This strategy gives room for the students to exchange, explore and air their views (Nardos, 2000:196). However, they need to be managed and organized well to be effective. The purpose of discussion is to examine information in order to develop a deep and broader understanding of a topic. However, students should have prior knowledge and experience with a current topic for discussion to be successful. In line with this idea, Frazee, et al (1995:79) argued that, through discussion there is an opportunity for higher order thinking and increased interaction among all students.

Brain storming

This is when the students generate as many ideas as possible about a topic-an ideal storm! It can be a great way to start a class on any given topic. It may be done in a number of different ways: in groups –recording their ideas on chart paper, in pairs, or as a whole class, with the teacher (or a student) writing the ideas on the board or chart paper. It is a great way of finding out of the students what they already know on a subject as well as an excellent review activity. (Bonwell and Eison, 2003:132).

Peer-Teaching

Peer-teaching is a participatory, active and democratic strategy integrated into the students' own experience; that results in deep learning. Peer- teaching involves occasional use of students in the class who have experiences because of their good background in particular area. Peer-teaching is also an appropriate strategy to be applied in teacher training program. It can solve the problem of large class size and it may release teacher educators' time for personal research or for producing resource based learning material (Benet et al., 1996:38).

Co-operative Learning

Working with peers is a major feature of **cooperative learning** (sometimes also called collaborative learning). In this approach, students work on a task in groups and often are rewarded either partially or completely for the success of the group as a whole. Aspects of cooperative learning have been part of education for a long time; some form of cooperation has always been necessary to participate on school sports teams, for example, or to produce a student-run school newspaper. What is a bit newer is using cooperative or collaborative activities systematically to facilitate the learning of a range of educational goals central to the academic curriculum (Prince, 2004).

Even though teachers usually value cooperation in students, circumstances at school can sometimes reduce students' incentives to show it. The traditional practice of assessing students individually, for example, can set the stage for competition over grades, and cultural and other forms of diversity can sometimes inhibit individuals from helping each other spontaneously.

Strategies exist, however, for reducing such barriers so that students truly benefit from each other's presence, and are more likely to feel like sharing their skills and knowledge. Here, for example, are several key features that make cooperative learning work well (Johnson & Johnson, 1998; Smith, etal., 2005):

Students need time and a place to talk and work together. This may sound obvious, but it can be overlooked if time in class becomes crowded with other tasks and activities, or with interruptions related to school (like assemblies) but not to the classroom. It is never enough simply to tell students to work together, only to leave them wondering how or when they are to do so.

Students need skills at working together. As an adult, you may feel relatively able to work with a variety of partners on a group task. The same assumption cannot be made, however, about younger individuals, whether teenagers or children. Some students may get along with a variety of partners, but others may not. Many will benefit from advice and coaching about how to focus on the tasks at hand, rather than on the personalities of their partners.

Assessment of activities should hold both the group and the individuals accountable for success. If a final mark for a project goes only to the group as a whole, then **freeloading** is possible: some members may not do their share of the work and may be rewarded more than they deserve. Others may be rewarded less than they deserve. If, on the other hand, a final grade for a group project goes only to each member's individual contribution to a group project, then **overspecialization** can occur: individuals have no real incentive to work together, and cooperative may deteriorate into a set of smaller individual projects (Slavin, 1994).

Students need to believe in the value and necessity of cooperation. Collaboration will not occur if students privately assume that their partners have little to contribute to their personal success. Social prejudices from the wider society-like racial bias or gender sexism, for example-can creep into the operations of cooperative groups, causing some members to be ignored unfairly while others are overvalued. Teachers can help reduce these problems in two ways: first by pointing out and explaining that a diversity of talents is necessary for success on a group project, and second by pointing out to the group how undervalued individuals are contributing to the overall project (Cohen, Brody, & Sapon-Shevin, 2004).

Educational Visit /field Trip Method

Field trip: - is a planed visit to places out side the regular classroom to obtain information directly and study real situations. The visit can be used to develop critical thinking and broaden the horizons of the learners as they see different things and activities. They can also be used to make the relationship between the school and community programs closer.

Group Work

Group work is part of collaborative strategies of teaching learning. It is one of the best ways of encouraging active learning by arranging the learners' work together in group. It can take many forms involving pairs of students working together, up to ten learners together or it can involve students who work individually and come together in groups to compare and discuss the results of their group. If necessary, random, gender, interest and ability groups can be formed (kyriacou, 1998:39).

Demonstration

A demonstration activity is when the instructors demonstrate how to do something in front of their class. The purpose of doing a demonstration is to show the students HOW to do something in both words and actions. When an instructor demonstrates, he /she should point out the process, step by step. Having written instructions on the board or on a piece of chart paper is also helpful. (Cpel, et.al, 1995)

Individual Assignments

Virtually all educationalists agree that the most effective way of bringing about lasting student learning is to get students actively involved in the learning process. To this end, asking students to carry out individual assignments, projects, etc is one of the most effective ways of doing this. They are, however, also extremely powerful vehicles for bringing about learning-often at a very high level-and should therefore be regarded as teaching/learning methods in their own right.

A project method is a practical and natural life like learning involving the investigation and solving of problems by individual or a group of trainees. Ideally, project work should consist of a task in which a trainee sets out to achieve some definite goal of real personal value MoE (1999:84). It also exposes students to natural settings to investigate things and come up with new

findings or concrete products (Obanya, Shabani and Okebukela, 1996:70). Moreover, Walkin (1990:58) notes that a project may be set either as an individual task or a small group undertaking. The project may be designed as the learning process in which group members are faced with new concepts and unfamiliar activities or as a device for the integrating of several previously mastered individual skills.

Inquiry Method

The inquiry method of teaching, according to Biadgelign (2010:155), can be employed to any subject area, most of the time, at higher institutions and at secondary schools. Inquiry method can be seen, according to Joyce and Weil (1980) as cited in Dunkin (1988:63), as a process for investigating, searching, explaining, or interpreting of unusual, unknown, or problematic situations or phenomenon. In this method, students inquire into the nature of a problem with a view of finding some answers why the problem exists.

The assumption behind using this method is that students will acquire or gain a firm grasp or understanding of the subject matter by learning that all knowledge is tentative and that, as tentative knowledge is disconfirmed, it will be replaced with new knowledge. This is due to the fact that what was true yesterday could be false today or tomorrow. Hence, teachers and students have to strive, have to dig, have to search, or in short have to inquire for the truth in the process of teaching and learning supporting this, Biadgelign (2010:154) states that students are expected and have to realize that statements about phenomena are based on rigorous investigation.
The success or failure of the method will very much depending on the competence, enthusiasm, and confidence of the teacher.

Case Method

The case method is a means of organizing a course as a whole, utilizing case studies to structure course design. Discussion and written exercises generate knowledge holistically that may transcend the need for lecture, as students learn through carefully guided explorations of a collection of thematically related cases. Originating in the medical field to train future physicians, the basic premise of PBL is that learning should be a constructive and active process (Gijselaers, 1996). Therefore, the role of the instructor is not one of providing direct instruction

through traditional lecture-discussion format, but rather one of facilitating student learning through innovative, challenging and collaborative problem solving exercises. This requires careful and intentional efforts and course preparations.

Discovery Method

The discovery method, according to Bruner, Wittrock and Cronbach as cited in Brown and his associates (1992:58), has been defined in different ways. Sund and Trowbridge, for instance, take the view that discovery occurs when an individual is involved mainly in using his/her mental processes to mediate (discover) some concept or principle. Similarly, Brown (1992) cited in Biadgelign (2010:158) notes that discovery method is the mental assimilation by which the individual grasps a concept or principle resulting from physical and mental activity. MoE (1999:74) also notes that "discovery is a process of search and selection" "what is sought and selected varies with the kind of learning taking place". Therefore, the primary emphasis is the discovery method is to know/understand the procedures than finding the answer/solution. Remember that knowing the how of the process (the problem) is more important than finding what (merely getting the answer) the problem is all about. Obanya, Shabani and Okebukela (1996:76) defined discovery learning as a method of instruction in which the student does something beyond sitting in his/her seat and paying attention to a teacher in the classroom. Discovery method becomes more meaningful and interesting for students when activities are directed by teachers and approached inductively (which is called guided discovery): starting from the details, particulars, explanations or interpretations and then proceeding to generalizations (Biadgelign, 2010:159).

2.9. Factors Affecting Application of Active Learning

Different educators have noted that the effective implementation of active learning can be influenced by a multiple of factors. Some of them are discussed below.

Teachers' and Students' Attitude of Active Learning: Teachers' and students' attitude of active learning largely depend on the knowledge they adhere. This means that teachers and students who strongly support the traditional method of teaching assume that the teacher is the only source of knowledge and knows best. To such teachers and students teaching takes predominant role over learning. Indeed students are assumed "empty vessels" to be filled by the teacher .O'Hara and O'Hara (1998:78). The authors further write "due to their perceptions many teachers and students tend to avoid active learning."

School facilities: Besides social environment of a given institution, the location, size, shape and construction of the classroom, the presence and effective management of different instructional facilities like: furniture, resource center, laboratory and library services have direct bearing in the instructional methods. Lue (2000:17) explains that teachers who teach many students in over crowded classroom often say that it is certainly not suitable to provide activities and group works for such classes. Similarly, REB of SNNP (2003:19), in its survey study has indicated that teachers believe that they cannot do practical activities, problem solving (active learning) in over crowded classrooms.

Class Size: It is not suitable to provide different experiments and group works having many students in over crowded classroom. Sguazzin and Graan, (1998:54) in their study have indicated that schools in many parts of Africa are composed of large number of students. Thus giving students enough attention and meeting the need of every student so as to engage actively in learning process is difficult.

The Physical Environment: A number of schools confirmed that the physical environment (classroom arrangement, furniture arrangement, classroom appearance and layout etc) contribute a lot to promote active learning. A clean and well kept room with appropriate resources and well

aired room help to establish a positive contribution to implement active learning. (Sguazzin and Graan1998:77)

The Design of the Teaching Module: Most text books and modules do not incorporate active learning. They only serve one-way instruction. In one way communication the learner reads what has been written but in no way responds to the material. This greatly reduces the creativity of the learners and the implementation of active learning. (Leu, 2000:86).

2.10. Teaching Practices that Promote Active Learning Approaches

Traditional teaching practice based on the textbook-chalkboard-lecture-homework-test paradigm has long been criticized as inadequate and inappropriate for student learning (National Commission on Education, 1983; Johnson, 1999). Literature review from various sources have shown that various disciplines are using active learning to enhance more effective teaching and learning (Amundsen ***et al.,*** 1993; Griffiths and Partington, 1992, Holliday, 1991). By reexamining the course design, teaching and learning methods, assessment methods and feedback and evaluation, active learning can be encouraged.

The content of a course is traditionally communicated through its syllabus. Syllabus topics easily obscure the fact that content embraces the range of theories, ideas, processes, principles, concepts, facts and skills that a lecturer expects students to learn. No wonder that students sometimes waste valuable time trying to discover the implicit criteria on which they will be assessed or that they often focus on issues which the lecturer did not intend them to concentrate on. Yet active learning calls for more than ordinary care in thinking about aims, whether the purpose is to devise a completely new course or to develop an existing one. Most statements of course aim focus on the 'what' rather than the how' of learning: they are designed to outline the body of knowledge which the course seeks to convey.

This is of course crucial; but where active leaning is the goal, the common ground of intellectual commitment is necessarily wider (Boyer, 1990). It extends beyond the assimilation of knowledge to skills which students need to develop or refine in offer to review, analyze, synthesis, apply and communicate what they have learned. It is also likely to encompass attitudes and values which

may be inseparable from the processes of acquiring and deploying knowledge: for instance, an ethical stance, a respect for the nature and limits of evidence, environmental awareness, and a concern for the welfare of others.

Promoting active learning is obviously more than a matter of good course design. It calls for a blend of teaching methods which will itself set students an array of learning challenges. In practical terms, this usually entails some combination of the traditional and the innovative. Students are unlikely to be stimulated to become more active learners by a bland bread - and - water diet of lectures, tutorials and practical each taught in uniformly conventional and rather limited ways. Nor would it be realistic to suggest that active learning demands a root - and - branch rejection of established teaching approaches in favor of wholesale innovation. In education, assessment fulfils a variety of purposes which are broadly of two kinds.

Firstly, judgmental purposes, where the concern is to arrive at global evaluations of students' level of attainment, Secondly, developmental purposes, where the concern is essentially diagnostic, designed to yield information which will help students to improve the quality of their learning. Assessment procedures are unlikely to be valid or reliable if they do not closely match the scope and aims of a course and the teaching - learning methods employed. And where active learning is being promoted, an appropriate match is especially important. However, this is difficult to achieve, for no one method of assessment is likely to be sufficient by itself.

There is a crucial relationship between active learning and a sense of what has been achieved. Students are held back from learning actively and effectively if they do not have an informed understanding of how well they are doing and what their study strengths and weaknesses are. Likewise lecturers cannot be confident of their capacities to promote active learning unless they take steps to monitor and evaluate their own efforts.

CHAPTER THREE

3. RESEARCH METHODS AND DESIGN

This Chapter deals with Study Area and its selection, research method and design of the study, sample population, sampling techniques and procedures, sources of data, instruments of data collection, procedures of data collection, and data analysis of the study.

3.1. Study Area and its selection

The study area was Awash Sebat Combined Arms Academy which is located at Awash Sebat, approximately 260km from Addis Ababa just on the right side of the main road from Addis Ababa-Harare and Djibouti junction. It was established as an academy at the beginning of 1999 EC and four batches of tactical level leaders B.A degree have been graduated from the academy. The Academy was selected because of two major reasons. Firstly, it was difficult to include more colleges in this study as the time frame for the entire study was very limited. Secondly, combined arms academy is an institution in which the researcher has been working for the last two years. So that he is familiar with the college culture and also manage to collect relevant and sufficient data within the limited time frame.

3.2. Research Design

The general method of this study is mixed, quantitative supported by qualitative approach. Mixed methods design is useful when the strength of both quantitative and qualitative can provide the best understanding for research problem (Cresswell, 2009). For the purpose of this study, a descriptive survey research design was employed. The design was selected on the assumption that it is helpful to gather enough information from many people on the issues under study. The appropriateness of this design for such study was noted by many scholars. For example, Koul (1996:405) states that descriptive survey design becomes useful particularly where one needs to understand some particular information. Best and Khan (1989:18) have noted that a descriptive survey research design involves a clearly defined problem and definite objectives.

3.3. Study subjects

3.3.1. Population of the Study

Combined Arms Academy instructors, students and commandants were the population of the study. Fifty one (51) students from second batch, 22 instructors and 3 commandants of the academy. In total 76 populations. There fore, all instructors, students, and commandants of the academy were the total population for which data were available.

3.3.2. Sampling Techniques and Procedures

In an effort to undertake this study, availability sampling and purposive sampling techniques were used. All instructors (22), students (51) and commandants (3) were selected using availability sampling technique because their number is very small. Vanderstoep and Johnston (2009:49) state that availability sampling involves selecting people who are available or convenient for the study. The researcher believes that, the indicated amounts of individuals are sufficient to provide information about the practices of the implementation of active-learning on survey questionnaire.

For the qualitative part of the study, purposive sampling technique was used. Accordingly, 8 students from first and second year, 4 instructors, and 3 commandants were interviewed. With this connection, the researcher believes that the subjects selected for this purpose have better attachment and experiences about the area of study than any other sources.

3.4. Source of Data

3.4.1. Data collected

The data for this study included both primary and secondary sources to collect relevant information. The primary data were collected the first time and happen to be original in character. Quantitative Data were collected from instructors and students of the academy, and qualitative data were collected from selected instructors, students, and commandant of the academy. The secondary data on the other hand are those, which have already processed and documented by the academy.

3.4.2. Data Gathering Instruments and Procedures

To obtain adequate information, three types of data collection instruments were used in this study. There are questionnaires, semi-structured interview and observation checklist

3.4.2.1. Questionnaire

Questionnaire was used to collect relevant and first-hand information from key informants such as teachers and students. The items of the questionnaires were mainly close-ended questions and accompanied by some open ended ones.

The questionnaires had five parts. The first part of the questionnaire was intended to gather background information of the instructors and students. The second part of the questionnaire consisted of items that intended to examine instructors' and students' utilization of active learning. The third part was about the factors affecting the implementation of active learning strategies. In the fourth part of the questionnaire the respondents were asked perception towards active learning and the last practices that promote active learning approaches in the academy.

3.4.2.1.1. Questionnaire Validation and Reliability process

At the begging questionnaire was adapted and modified from the available literature and review existing instruments that measure similar variables from different sources, for instance, Firdissa (2005), Taye (2008). To increase credibility of the constructed and adapted questionnaire, the researcher used validation and reliability process as follows:

Questionnaire Validation process

Construction and validation of the questionnaire was carried out in two stages. The first stage was the phrasing of 56 items regarding active learning instruction approach, and their categorization within the four domains described in (Table 2). These 56 items were then presented to 4 colleagues graduated from educational research. According to their responses 6 statements were eliminated so the first version (V1) of research tool contained 50 items.

At the second stage, the questionnaire V1 was administered to the thesis advisor for further comments, and evaluation'. Based on the comments and evaluation of thesis advisor response 4 more statements were eliminated and some slight modifications were applied to 3 other items. Forty-six (46) items were selected for the last version of research questionnaire with 80% higher agreement (at least 4 experts out of 5). The last version of research tool contained 46 items and it is attached in the appendixes 1 &2.

Questionnaire Reliability process

The research questionnaire was presented to 10 instructors and 10 students randomly selected at combined arms academy. The students and instructors were told how to give response to the questionnaires by the researcher during the pilot study. To this result, instructors and students were given two days to fill and return the questionnaire. Then, the reliability coefficients were computed using the internal consistency methods (Cronbach's Alpha, 1951, as cited in Ferguson and Tekane, 1989). Accordingly, Questionnaire reliability was examined using Cronbach's Alpha, yielding the value **0.736.**

Instructors' and students' responses were processed to produce the 46 items included in the questionnaire using the SPSS program. The analysis of items was undertaken in stages: in each stage, one domain was identified and its reliability level was determined using Cronbach's Alpha. At the end of the process, the items were divided into four domains. According to Gay,L.R.(2000), if reliability coefficient is $\geq$ 0.60, it can be accepted as reliable instrument. Thus, the instruments were found reliable to collect data for the main study and then administered as scheduled.

Table 2 Summary of the Item Analysis

Variables	No of items	Cronbach's Alpha
Utilization of active learning	14	0.730
Factors affecting active learning	10	0.720
Perception of students and instructors to wards active learning	8	0.753
Teaching practice that promote active learning	14	0.742
Total	46	**0.736**

3.4.2.2. Semi-structured Interview

Semi-structured interview was used to collect data from selected students, instructors, and commandants. The reason why Semi-structured interview was employed that the procedure to be used is standardized and determined in advance as well as to obtain answers to carefully phrased questions (Koul, 2008:176). Using this instrument is important to get thick data about the issue under study.

3.4.2.3. Classroom Observation

Observation is a process in which the investigator observes what is occurring in some real life situation. Lewy (1977:163) noted that observation is useful to indicate how the lesson is divided in a variety of activities such as: group work, individual work, role-playing, discussion and others. Hancock (1998:89) also says, "Because of the richness and credibility of information it can be a desirable part of data gathering instrument. Therefore, to obtain more information, observation in the actual classroom teaching and learning process was used as data gathering instrument.

For the purpose of observation, checklist was employed. Based on this, the researcher, and his co-observer observed three classes. To select the actual classes for observation, purposive sampling technique was used. From the armored and motorized, artillery and anti-aircraft departments (tactics, topography and fire control) classes were selected respectively using lottery system and accordingly, 6 observations were made with two observations in each class.

The observations focused on teacher-student interaction in relation to active learning approaches, classroom condition, instructors' and students' activities in classroom, utilization of instructional material, in class and out of classroom evaluation (Pedagogical centers and libraries are very important facilities that should occur in schools in order to implement many of the innovations in the Education and Training Policy). Therefore, pedagogical centers and libraries were taken as sources of data where ever available.

Table 3 Summary of variables and respective sources, instrument of data collection and techniques of analysis

No	Variables	Sources and instruments of data collection					Data analysis techniques
		Instructors survey	Students Survey	Commandants interview	Selected instructors interview	Selected students interview	
1	Utilization of active learning	✓	✓	✓	✓	✓	Statistical
2	Factors affecting active learning	✓	✓	✓	✓	✓	Statistical
3	Attitude of students and instructors to wards active learning	✓	✓	✓	✓	✓	Statistical
4	Teaching practice that promote active learning	✓	✓	✓	✓	✓	Statistical
5	Implementation objectives of MoND in the way of active learning			✓	✓	✓	Narration/ descriptions in words

3.5. Procedures of Data Collection

To assess practices and problems of the implementation of active learning strategies in the academy, first questionnaires and semi-structured interview were developed. Then, questionnaires were pretested (piloted) being administered to 10 teachers and 10 students of Combined Arms Academy in different fields of study. Accordingly, with some modifications and clarifications, the final instruments were developed and used for the purpose. The questionnaires were designed and administered by the researcher to teachers and students. An interview was also conducted through disclosing the purpose of the study based on the permission and willingness of the participants by the researcher. Finally, classroom observations took place by the researcher and co observers.

3.6. Data Analysis

Quantitative and qualitative approaches of data analyses were employed. In analyzing the quantitative data, respondents were categorized and frequencies were tallied. Percentage and frequency counts were used to analyze the characteristics of the population as it helps to determine the relative standing of the respondents. Moreover, mean scores, standard deviations, independent sample t-tests were used for analyzing the items with five point Likert scales and yes or no questions to assess the practice and problems of the implementation of active learning strategies in the academy.

Independent sample t-test is used when you want to compare the mean score, on some continuous variable, for two different groups of participants. Based on this the researcher compared the mean score of the two different groups of teachers and students. The assumption of the independent t-test which is equal variables' of groups on the treated was considered during the comparison. The levenes' test of (significance > 0.05) was taken as a point where the two groups have equal variables (homogeneity of variances) equal variance assumed.

Analysis of qualitative data involves working with data, organizing it, breaking it into manageable units and searching for patterns or themes to discover what is important to tell others (Biklen and Bogdan, 1992). In order to analyze the data, therefore, the searcher repeatedly read the interview scripts to find words and phrases that appeared repeatedly. Then the data were categorized in to themes using the phrases and words were analyzed in sufficient detail. Furthermore, before starting the analysis, the researcher codified both the quantitative and qualitative data so as to facilitate its organization, retrieved and interpretation. After analyzing the quantitative and qualitative data separately, the researcher then compares their results to see the extent of their consistency.

For the purpose of observation, observation checklist was employed. Based on this, the researcher, and his co-observer observed the selected classes. The result of observed cases were added up and presented in separate tables and see in the appendix (7). To this end, analysis and interpretations were made on the data obtained through questionnaires, interview and observations.

3.7. Ethical Consideration in the Research Work

In the journey of the study, efforts were made to protect the research participants, to improve the validity of the data gathered, and to maintain rigor of the over all research procedures and findings. Utmost efforts were made to protect the identities and moral values of the research participants. Equally, validity and procedural rigor has been taken care of as a part of maintaining ethical standards of the research work. Among others, efforts were made a) to give clear, understandable and focused directions and criteria for data collection procedures; b) to maintain anonymity of the data sources; c) to corroborate the research results and interpretations by way of mixing the quantitative and qualitative results (Firdissa, 2010:158-161). Consequently three ethical principles have been considered in this study; 1) informed consent,2) anonymity 3) procedural rigor

1. **Informed consent:** consent and cooperation of data sources were secured through different mechanisms. In the first place a) the procedure to be followed in giving information on the basis of specific data collection tools; b) the envisaged confidentiality of the responses in were clearly presented.
2. **Anonymity:** utmost efforts were made to maintain the anonymity of the research participants. The information the research participants provided by no means could reveal their identities.
3. **Procedural rigor:** care was taken to maintain the rigor of the procedures in relation to preparing and administering the tools for data collection, in selecting appropriate participants, in collecting data, in meticulously sorting out and analyzing the data and validating finding. Overall, utmost possible ethical roles have been considered to ensure that the research is conducted in ethical manner maintaining consent, anonymity and procedural rigor.

CHAPTER FOUR

4. PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This Chapter deals with the presentation, analysis and interpretation of the data collected through questionnaires, interview, and classroom observation checklist. It consists of two parts. The first part is concerned with the description of the background characteristics of the respondents of the sample population. The second part is concerned with the analysis and interpretation of the main data.

4.1. Background characteristics of the respondents

The questionnaires were administered to 51 students and 22 instructors. Forty-eight (48) students and 22 instructors have returned the questionnaire and used for analysis and this represents an overall response rate of 92.3% and 100% respectively. The background information of instructors (n = 22) and students (n = 48) who completed and returned the questionnaire are shown.

Table 4: Background Information of Sample Instructors by department and age

Variables	Category	Frequency	Percent (%)
Departments	Armored & motorized	8	36.4
	Artillery	9	40.9
	Anti-Aircraft	5	22.7
	Total	**22**	**100.0**
Age	35-40	6	27.3
	41-45	13	59.1
	46-50	3	13.6
	Total	**22**	**100.0**

It can be depicted from Table 4 that the number of samples selected from each department is almost proportional to each other with slight differences. That is the percentages of sample instructors in Table 3 from Armored and motorized, Artillery, and Anti-Aircraft Departments are 36.4%, 40.9%, and 22.7% respectively.

Regarding the age of the respondents, 27.3% of the instructors were between 35 and 40 years and 59.1% of the instructors were between 41 and 45 years. 13.6% of the instructors were between 45 and 50 years. This shows that the majority of the instructors were in the adult age group.

Table 5: Background Information of Sample Instructors by Educational level, teaching experience and Service year in the army

Variables	**Category**	**frequency**	Percent (%)
Educational level	BA	22	100.0
	Total	**22**	**100.0**
Teaching experience	<2	11	**50.0**
	2-5	9	49.9
	6-10	2	9.1
	Total	**22**	**100.0**
Service year in army	15-20	2	9.1
	21-25	17	77.3
	26-30	1	4.5
	>30	2	9.5
	Total	**22**	**100.0**

With regard to the educational level of the respondents, 100.0% of the instructors were first degree holders which are minimum requirement in the academy level. As to the teaching experience of the respondents, the majority of the instructors (50.0%) had teaching experience of less than two years, and 49.9% of them had teaching experience between two and five years, and the rest 9.1% of instructors had teaching experience between six and ten years. This indicates that the majority of the instructors had relatively little teaching experience.

Table 6: Background Information of Sample students by department, age and batches

Variables	Category	Frequency	Percent %
Departments	Armored & motorized	18	35.29
	Artillery	17	33.33
	Anti-Aircraft	16	31.38
	Total	**51**	**100.0**
Age group	30-35	22	43.15
	35-40	18	35.29
	41-45	10	19.60
	46-50	1	2.00
	Total	**51**	**100.0**
Educational Level	12^{th}	46	90.2
	Diploma	5	9.8
	Total	**51**	**100.0**

Table 6 shows that 35.29%, 33.33%, and 31.38% of students were from Amour and motorized, Artillery, and Ant-aircraft Departments respectively. This shows that numbers of students are proportionally represented from three departments with slight difference.

Regarding the age of the respondents, 43.15% of the students were between 35 and 40 years and 35.29% of the students were between 41 and 45 years. The rest of the them 19.60%, 2.0% was between 46 and 50 years and above respectively. This shows that the majority of the students were adults.

4.2. Analysis of the Data

This part deals with analysis of data obtained from questionnaires, observations, and interviews. The analysis gives emphasis on the extent of active learning utilized, the difference between teachers and students in their perception on utilization of active learning, factors affecting the implementation of active learning, attitude of teachers and students towards active learning, practices that promote active learning in the academy and the implementation of objectives of MoND in way (favor) of active learning methods at the academy.

4.2.1. The Utilization of Active Learning Strategies

The New Education and Training Policy of Ethiopia demanded a new paradigm shift of teaching and learning, the development of new strategies of teaching and learning based on active learning. Based on this, an attempt was made to shift traditional teacher dominated of teaching to student-centered learning. The core interest of this study was to assess the extent of active learning method is being utilized by teachers and students. To meet this, series of questions were asked and the response of teachers and students regarding the extent of utilization of different strategies of active learning method was summarized in the following table.

Table 7: Frequency, percentage, and mean values of instructors' and students' reports about the extent of use of active learning strategies (n=70)

Learning strategy	5= always		4=frequently		3=sometimes		2=rarely		1=not at all		Mean
	F	%	F	%	F	%	F	%	F	%	
Lecture /explanation	29	41.43	24	34.3	15	21.4	2	2.9			4.14
Problem solving method	9	12.9	37	52.86	21	30	3	4.3			3.74
Role playing	13	18.57	27	38.6	22	31.4	7	10.0	1	1.4	3.62
Group discussion	45	64.3	22	31.4	2	2.9	1	1.4			4.58
Brain storming	11	15.71	18	25.8	25	35.71	10	14.3	6	8.6	3.26
Peer teaching	5	7.1	24	34.29	20	20.8	15	21.4	6	8.6	3.10
Co-operative learning	15	21.43	28	40.0	18	25.7	5	7.1	4	5.7	3 .64
Educational visits	9	12.86	9	12.9	25	35.71	18	25.7	9	12.9	2.87
Group work	22	31.43	29	41.4	15	21.4	4	5.7			3.99
Demonstration	8	11.43	23	32.9	28	40.00	9	12.9	2	2.9	3.37
Student independent work	19	27.14	33	47.1	17	24.3			1	1.4	3.98
Inquiry	14	20.00	26	37.1	22	31.4	7	10.0	1	1.4	3.64
Case study	7	10.00	10	14.3	28	40.00	18	25.7	7	10	2.89
Discovery	2	2.86	14	20.0	27	38.57	11	15.7	16	22.86	2.64
G/mean											3.53

Teachers and students were asked to indicate the extent to which they had been utilizing different active learning strategies in their classroom. From the analysis of the responses (Table 7 above), lecture/explanation and group discussion were found to be the most frequently used active learning strategies which had been utilized by 29 (41.43%), 45(64.30%) of the respondents. The mean value of the responses (4.14), (4.58) however, shows that lecture and group discussion methods was frequently' employed. These methods were employed widely, because they were familiar with both teachers and students.

Supporting this finding, Helprin (1994), comments on the domination of old instructional approach in most higher education. He suggests that most activities today, in majority of higher education continue to reflect an "old style of instruction where students sit quietly, passively receiving words of wisdom being professed by the lone instructor standing in front of the class. In line with this finding, Frazee, et al (1995:79) argued that, through discussion there is an opportunity for higher order thinking and increased interaction among all students.

Next to group discussion method, problem solving and role play had been frequently used. The mean value of the responses (3.74%), (3.62%) similarly shows frequently employed. According to Lue, (2000:22) problem base learning is derived from the conviction that the learner is an active and creative individual with the will and ability to seek knowledge and self development. Problem solving method is an instructional technique where teachers and learners attempt in a conscious, planned and purposeful effort to arrive at some solution (Aggarwal 1996:91). Brain storming and peer teaching has been employed some times and frequently respectively. The mean value of the responses (3.26%), (3.10%) however, shows that brain storming and peer teaching methods were some times utilized in the academy.

Concerning co-operative learning method is one of the most popular active learning strategy which has been frequently utilized by 28 (40.0%) of the respondents. The mean value of the responses (3.62) is very close to 4. It shows that co-operative learning method was utilized frequently. Next to co-operative learning, educational visits which has been employed some times by 25 (35.71%) of the respondents. The mean value of the responses (2.87) is very close to 3. This indicates that educational visits were some times employed.

On the other hand, group work has been employed frequently by 29 (41.4%) of the respondents. The mean value of the responses (3.99) is very close to 4. This indicates that group work of instructional method was frequently employed in the classroom. But the methods especially group work can help only to develop the lower levels of cognitive domain. The other active learning strategy is demonstration which has been employed sometimes by 28 (40/0%) of the respondents. The mean value of the responses (3.37) is very close to 3. This indicates that, demonstration of instructional method was sometimes employed.

Next to demonstration, student independent work, which has been utilized frequently by 33 (47.1%) of the respondents. The mean value of the responses (3.98) is close to 4. This indicated that frequently employed. Inquiry method has also been sometimes practiced by 22 (31.4%) of the subjects. The mean value of the respondents (3.64) is close to 3. This indicated that inquiry method was sometimes practiced. Case study method has also been sometimes practiced by 28(40%) of the respondents. The mean value of the respondents (2.89) is close to 3. This indicates that case study method was sometimes utilized in the classroom.

On the contrary, discovery method is found to be the least implemented learning strategy which had not been used at all by 16(22.86%) of the respondents and had been always used by 2(2.86%) of them only while it had been used sometimes by 27(38.57%) of them. These analysis shows discovery method of teaching was least implemented in the academy. However, MoE (1999:74) notes that "discovery is a process of search and selection" "what is sought and selected varies with the kind of learning taking place". Therefore, the primary emphasis is the discovery method is to know/understand the procedures than finding the answer/solution. Remember that knowing the how of the process (the problem) is more important than finding what (merely getting the answer) the problem is all about.

From this analysis, it can be concluded that, group discussion and lecture were the most frequently employed in the academy. The mean value of the responses (4.14), (4.58), shows that lecture and group discussions were frequently employed. Next to lecture, the most frequently utilized active learning strategies reported by the instructors and students were problem solving, role-play, co-operative learning, group work, independent work, inquiry method. In line with this, Bonweel and Eison (2003:76) noticed that students must do more than just listen. They need to read, write, discuss or engage in problem solving activities. Lastly, Brain storming, peer-teaching, educational visits, demonstration and discovery method were employed sometimes in the academy.

The overall grand mean of the responses was 3.53, which means that the instructors and students utilization of active learning strategies were between "sometimes"and "frequently".

Similarly, the data obtained from the interviews made with the commandants, and selected teachers and students' and open-ended questions shows that lecture/explanation is the most commonly employed method of teaching by teachers at combined arms academy. Next to the lecture, group discussion, group work, and student independent work, educational visits, demonstration were also most commonly employed by teachers and students in the academy.

Others active learning strategies, inquiry method, discovery method and brain storming and, role play of teaching methods have been employed by teachers in the classroom either rarely or not at all. Supporting this idea, observations made by researcher show that all classroom activities were not well performed by the instructors. For example, many instructors do not give group work activities, ask questions or give exercises. Moreover almost all of the instructors do not follow up students' participation and activities. One of the instructor's said:

> *I employ different teaching approaches as frequently as the subject matter requires in addressing the needs of my students. For example, I give group work and individual assignments and presentations whenever there is a need to do that. I use group discussion whenever the content is a discussion issue. I also use demonstration method whenever the content is more of practical. If it is simulator class I use computer---*
>
> *Interview Ins-1 (March, 8 2013)*

The above respondent view indicates that, instructors were employing different teaching approaches to address the different needs of their students depending on the availability of teaching materials and resources, the nature of the course/content, the topic to be delivered, objectives of the lesson, and the number of students within a class. Supporting this, Firdissa (2005:51) state that effectiveness in learning depends upon a teacher's ability to select and use the appropriate teaching strategy at the appropriate time.

In general, both the quantitative and qualitative data indicated that, the level of utilization of active learning strategies in the academy was moderate. It is possible to infer that the implementation of active learning strategies in combined arms academy was fairly good.

4.2.2. Factors Affecting the Implementation of Active Learning

The summary of data obtained from teacher and student respondents to the questions asked to select the most serious factors that hindered the implementation of active learning in the academy. The summary has been summarized in Table 9.

Table 8: Percentage and Mean Values of Factors Affecting Instructors' and students' Implementation of Active Learning (n=70)

Factors	Most serious		Serious		Undecided		Not serious		Mean
	F	%	F	%	F	%	F	%	
Inadequacy of instructors' training	18	25.70	39	55.71	8	11.40	5	7.1	3.00
Wider use of continues assessment	21	30.0	29	41.4	8	11.4	11	15.7	2.90
Lack of Resource	16	22.9	23	32.9	15	21.4	16	22.9	2.55
Shortage of time to practice active learning	25	35.71	20	28.6	9	12.9	16	22.9	2.79
Large class size	18	25.7	32	45.7	5	7.1	15	21.4	2.77
Instructors' belief	18	25.7	26	37.1	14	20.0	12	17.1	2.71
Students' belief	21	31.0	22	31.4	17	24.3	9	12.9	2.83
Diversity of students' interest	19	27.1	31	44.3	10	14.3	10	14.3	2.84
Dominance of few students	22	31.4	26	37.1	11	15.7	11	15.7	2.84
Designing module	34	48.6	25	35.71	5	7.1	6	8.6	3.13
G/mean									2.84

Participants were asked to rate the extent of seriousness of the different factors in hindering use of active learning strategies in the classroom. Table 8 shows the frequency and percentage of their ratings of the problems. As it is indicated in the table, shortage of time to practice active learning in classroom and designing module were rated as the most serious factors each by

25(35.71%), 34(48.6%) of the subjects which have been negatively affecting the implementation of active learning strategies.

The mean values of the responses (3.00), (2.79) respectively .This shows that shortage of time to practice active learning in classroom and designing module were the most serious factors (problems) that affected the implementation of active learning.

In line with this finding, Capel et al (1995) found Shortage of time to practice active learning as the major factor in implementing active learning. They explained that, some teachers dislike active learning simply because it brings an extra demand in the planning, preparation and evaluation. In connection to this 25(35.71%), respondents pointed out shortage of time as the most serious problem to implement active learning strategies in the classroom.

Most text books and modules do not incorporate active learning. They only serve one-way instruction. In one way communication the learner reads what has been written but in no way responds to the material. This greatly reduces the creativity of the learners and the implementation of active learning. (Leu, 2000:86).

Moreover, inadequacy of instructors' training on the application of active learning strategy, the wider use of continuous assessment as evaluation technique, unavailability of instructional materials, large class size , Instructors' belief, Students' belief, Diversity of students' interest, Dominance of few students were rated as serious factors by 39(55.71%), 29(41.4%), 23(32.9%), 32(45.7%), 26(37.1%), 22(31.4%), 31(44.3%), 26(37.1%)of the respondents which negatively affected the implementation of active learning strategies. The mean value of responses (3.00), (2.90), (2.77), (2.71), (2.83), (2.84), (2.84), (3.14) respectively shows seriously affect the implementation of active learning.

Supporting this finding, many researchers pointed out that inadequacy of instructors' training on the application of active learning strategy is a serious problem in implementing active learning. For example, Frazee et.al (1995:80) states that, if teachers lack knowledge of the teaching (active learning) method which requires new roles and commitment, implementation will be seriously hampered. Hence, provision of in-service teacher training is essential to acquaint teacher trainers with new teaching-learning methodologies, which are learner oriented (active learning).

In line with this idea, Melese, (1999) stated that as one of its basic feature, active learning emphasizes on qualitative instead of quantitative assessment. It focuses on student's unique learning pace and process than on product. It employs continuous follow up, observation, records, interview, group and individual assignments. Of course, both teachers and students believe on the appropriateness of continuous assessment to implement active learning. The problem is that it led to unfair grading system or subjectivity due to its very nature. This indicates that, the revealed problem will affect the full participation of both teacher and student in their implementation of active learning.

In the same way, instructional materials are other elements to be considered in the implementation of active learning, because, the availability and unavailability of instructional materials can facilitate or impede the implementation of active learning (Amare Asgedom, 1998). This finding also reached to the same conclusion in that two groups of respondents disclosed the negative influence of instructional materials on the effective implementation of active learning.

Large class size was one of the serious factors which affect the implementation of active learning. Supporting this idea, Squazzin and Graan, (1998:54) in their study have indicated that schools in many parts of Africa are composed of large number of students. Thus giving students enough attention and meeting the need of every student so as to engage actively in learning process is difficult.

There is no question that interest, belief and perceptions are crucial factors in implementing active learning in classrooms. In this study instructors' belief and students' belief was serious problem to implement active learning strategies in classroom.

The overall grand mean of the responses 2.84 is very close to 3. It indicates that factors affecting instructors' and students' implementation of active learning strategies in the classroom was "serious".

Similarly, to open-ended questions and interview section participants raised their concern as follows. Inadequacy of instructors' training, shortage of time to practice active learning in classroom, un available of resource such as, laptop, internet services, inadequate military reference books, designing of teaching module were reported as serious problem to implement active learning approches in the academy. This is also witnessed during the class room observation.

In general, both the quantitative and qualitative data indicated that, the implementation of active learning strategies was seriously hindered by different factors in the academy. It is possible to conclude that the implementation of active learning strategy was seriously affected by various factors as indicated by the respondents. Accordingly, Shortage of time to practice active learning in the classroom and designing module were the most serious factors affecting instructors and students implementation of active learning strategies in the academy.

4.2.3. Attitudes towards Active Learning

Teachers and students attitude towards active learning can play a facilitating role for success of implementation of active learning approaches. Unless the teachers and students positively perceive the instructional methods used in the classroom, their interest and their activities may affect the successful learning achievement. Therefore active learning approach of learning can be affected by perception of teachers and students. For the analysis and interpretation of teachers and students perception of active learning methods likert- scale was used. Scoring was made by assigning values of 5, 4, 3, 2, & 1 for the strongly agree, agree, undecided, disagree and strongly disagree, responses respectively for statements written in such a way that agreement meant favorable perception. For those statements where disagreement meant favorable perception, scoring was done simply by assessing the above point in reverse order. Thus, score of five means the most favorable perception towards active learning methods of learning and score of one means a perception, which is least favorable. The response of teachers and students regarding the attitude towards active learning method was summarized in the following table

Table 9: Frequency, percentage, and mean values of Data Collected on attitudes of Students and instructors towards active learning. (n=70)

Items	1=S.dis. agree		2=Disagree		3=Undecided		4=Agree		5=S. agree		Mean
	F	%	F	%	F	%	F	%	F	%	
12					11	15.7	40	57.1	19	27.1	4.11
13			2	2.9	6	8.6	40	57.1	22	31.4	4.17
14			1	1.4	4	5.7	36	51.4	29	41.4	4.32
15	5	7.1	13	18.6	14	20	25	35.7	13	18.6	3.40
16	4	5.7	11	15.7	23	32.9	22	31.4	10	14.3	3.33
17	6	8.6	11	15.7	39	55.7	17	24.3	4	5.7	3.16
18			3	4.3	11	15.7	39	55.7	17	24.3	4.00
19	1	1.4	4	5.7	6	8.6	29	41.4	30	42.9	4.18
G/mean											3.83

In Table 9 item 12 states "The quality of education can be improved if teachers shift their instruction from the lecture methods to active learning approach". In responding to this item 57.1% of the students showed their agreement whereas 27.1% of them expressed their strong agreement. About 15.7% of them showed their undecided with the idea.

Item 13 states "Active learning enhances students level of understanding and involves them in problem solving." In responding to this item 57.1% of the students showed their agreement whereas 31.4% of them expressed their strong agreement. About 8.6% of them showed their undecided 2.9% they said strongly disagree with the idea. This seems to generalize that most of them have the assumptions that active learning enhances students level of understanding.

In item 14 of Table 11 (see Appendix 1&2), the respondents were asked whether they believe active learning creates the opportunities to share experiences and encourage friendship among students. In responding to the item, the majority of the respondents (51.4%) replied that they agree with the idea, and 41.4% of them again showed their strong agreement.

Item 15 which says: "Teaching is the sole responsibility of teachers." This issue was supported by the majority (35.7 %) of the respondents. The mean value of the responses is between "Undecided" and "Agree".

The grand mean value of the responses of the instructors and students is 3.83. It is very close to 4 and tending to the value for "Agree. It implies that most instructors and students seem to have positive attitudes towards active learning. Hence, the two groups have perceived active learning positively.

In line with this idea, Dary and Terry (1993) have noticed that, if the students had no appropriate perception on the procedures and activities of participatory, active learning, they are liable to develop negative attitudes for various reasons. For instance, a student who used to exercise traditional, passive instructional method, which requires only listening, may look shy and uncooperative, or destructive and oppose at the beginning of student-centered classroom activities. On the contrary, according to Kyrncous (1998:39), active learning activities are likely to be enjoyed, offer opportunity for progress, are less threatening than teacher's talk activities, thereby foster more positive attitude in pupils towards the subjects.

Learner-centered instruction tries to acknowledge the students needs to determine what they are learning in the school, recognize and respond to the changing characteristics of different ages, utilize the strong motivational forces by keeping natural learning taught method used. Most learners enjoy themselves by their own work done or in groups. It makes no one bored and basic skills are not ignored (Hillary, 1998:313).

However, the data obtained through interview from selected teachers, students and commandants shows that, some instructors had no enough and concrete perception about how to install active learning in classroom, and also some students expect all things from their instructors instead of independent working, which has some impact on the effectiveness of implementation of active learning.

The main intention here is that there is strong tie between human attitude and their effort to implement or practice any task. In order to implement active learning, the implementers should develop the necessary positive attitude to wards active learning instructional methods.

In general, the result of this finding depicted that, if positive attitude of students and instructors are developed to wards active learning instructional methods and conducive environment is available, students and instructors are goodwill of active learning as effective instructional method to be employed in the academy.

4.2.4. Practices that Promoting Active Learning Strategies

Table 10 below pertains to instructors' and students' responses to teaching practices that could be employed in the classroom to promote active learning. The research subjects were asked to specify whether the teaching practices listed happened or not in their classroom with the objective to identify the unique teaching practices that promoted active learning. As it is indicated in the table, 68(97.10%) of the participants responded that involving students in doing practical exercise/war gaming and thinking about the exercise they are doing on the maps, on sand model and in the field is the teaching practice that happened in their classroom and promoted active learning. In line with this finding, MoND (2008) have noticed that, military education and training approach is more effective if it is supported with practical exercise and on building a learner's experiences and providing learning tasks. In the same way, in Army case involving officers' students in doing practical exercise/ war gaming and thinking about the exercise they are doing shifts the teaching methodology from "what to think" to "how to think" and places learning responsibility on the student through active participation. (U.S. Department of the Army.2003)

The second most utilized teaching practice is using students as resources which is answered as 'yes' by 62(88.57%) of the students and teachers all together followed by encouraging learning by doing and taking responsibility for one's own learning each specified as utilized in the classrooms by 61(87.14%) of the subjects. Encourage students to work together in their learning and giving choice to students were also reported by 60(85.71%) of the respondents each as the teaching practices that were implemented in their classrooms and promoted active learning.

From this analysis, it can be concluded that some teaching practices had been uniquely implemented and promoted active learning in the academy. These practices are: involving students in doing practical exercise/war gaming and thinking about the exercise they are doing on the maps, on sand model and in the field; using students as resources; encouraging learning

by doing; taking responsibility for ones own learning; encourage students to work together in their learning; and giving choice to students.

Similarly, data obtained from the open ended questionnaire and interviews along participants view on the unique opportunities (practices) that promoting active learning in the academy. The participants' response as follows: for effective implementation of active learning approaches positive reactions of stakeholders (commandants, instructors and students) are very important. As key informants (commandants, selected instructors and students) of this study reported that, the efforts have been made to enhance the knowledge and skills of instructors about the new system of instructions by commandants of the academy by inviting experts from civilian university giving work shop, teach general pedagogical course, sharing experience with other universities. In addition to this, teaching practices had been uniquely implemented and promoted active learning in the academy reported by participants were; involving students in doing practical exercise by using simulator, sand model, on the map when the subject matter is tactics, fire control, topography, encourage students to be direct participation in group discussion in the class room, instructors give assignment for their students and present for the class to build self-confidence.

From the quantitative and qualitative data it can be concluded that, the efforts have been made to enhance the knowledge and skills of instructors about the new system of instructions by commandants of the academy (positive reactions of stakeholders to wards active learning approaches), involving students in doing practical exercise/war gaming, using students as resources; encouraging learning by doing; taking responsibility for ones own learning; encourage students to work together in their learning; and giving choice to students. students officers who have had command and leadership . So this in turn will have unique opportunity to promote active learning in the academy.

Table 10: Frequency and Percentage values of Instructors and Students on Teaching Practices that Promote Active Learning strategy in the academy

	Variables'	Yes	No	Percent (%)	
20	Involving students in doing practical exercise/war gaming and thinking about the exercise they are doing on the maps, on sand model and in the field	68	2	97.1	2.9
21	Encouraging students to learn with all their sense of sight, smell, test, hearing and toughing	44	26	62.9	37.1
22	Focusing on critical thinking teaching methods	53	17	75.7	24.3
23	Encouraging learning by doing	61	9	87.14	12.86
24	Employing case study method and guided design	49	21	70.0	30.0
25	Encourage students to work together in their learning	60	10	85.71	14.29
26	Encouraging students to formulate theories of their own	53	17	75.7	24.3
27	Taking responsibility for your own learning	61	9	87.14	12.86
28	Focusing on process of student learning, not just the content of the discipline	23	47	32.9	67.1
29	Teaching learners how to learn with out a teacher	36	34	51.4	48.6
30	Provision for individual differences	45	25	64.3	35.7
31	Using students as resources	62	8	88.57	11.43
32	Giving choice to students	60	10	85.71	14.29
33	Encouraging speech in class room	57	13	81.4	18.6

4.2.5. Implementation of the Objectives of the Ministry of National Defense in the way of Active Learning Methods at the Academy

For the analysis and interpretation of implementation of objectives of Ministry of National Defense in the way of active learning approaches at the academy, interview and open-ended questionnaires were used. The interview was conducted with four selected instructors and three executive/ commandants of the academy. The questions raised by the researcher were, to what extent active learning approaches helped to realize the objectives of the Ministry of Defense? Before discussion of the participants view it is necessary to emphasize the Ministry of National Defense which is expected from the Combined Arms Academy to achieve in line with the mission given for the academy.

The Ministry of National Defense (MoND) is exerting its maximum effort towards the attainment of the required level of qualification and competence in formal and informal training and education programs. To realize this intention, a curriculum for a low and high level program is prepared based on the new Ethiopian educational and training policy (1994) and the training policy of the Ministry of the National Defense (1998).

Interest of MoND that is expected from the Combined Arms Academy: To enable the FDRE Defense Force carry out its constitutional mission effectively. The educational and training institutions being a center of capacity building are expected to:

- prepare competent human recourses for the current and future missions
- Produce democratic thinker, competent, mission oriented and professional man power
- Establish standardized institutions which are able to cope up with the development of current situation and dynamism

In order to produce the above capable and well-trained professional army, MoND military higher education is generally guided by accepted civilian accreditation standards and practices tailored to the needs of military education. However, teaching professional military education differs from civilian universities in at least two significant ways: 1) underlying theme of the subject Matter: professional military education addresses the diplomatic, economic, military and informational dimensions of national security, with especial emphasis on planning and conducting activities throughout the range of military operations. 2) Learning Environment: conducting professional military education bring together a faculty and student body of professional military officers and civilian government officials who have significant experience in the major disciplines taught at the colleges. In addition, these colleges have access to and use classified information and war gaming facilities not available to civilian universities. The above points are linked to the required skill and ability to obtain in the process of military training and education by promote student-centered (active learning approaches) in the institution. Because active learning approach, is helpful for students to understand the given subject related to current world views

In the open-ended part of the questionnaire and interviews, participants raised their opinion on active learning approaches of the academy. Based on that, most of the opinions indicated that

active learning approaches of the academy were implemented in line with the objective of the Ministry of National Defense. The graduated students from the college participated in national, international military missions and in peace keeping missions in different African countries. Besides, graduated students are leading at different levels in the institution of Ministry of National Defense. This indicates that in the way of student-centered teaching-learning approaches the academy produced mission oriented and professional man power as expected from it.

However, as the interviewees replied, the implementation of active learning approaches of the academy had its own limitation in achieving the objectives of the institution at different levels. These limitations were categorized in to three as key informants reported. Firstly, instructors related limitations to shortage of detail understanding of the Ethiopian military doctrine and military science. According to key informants, in the beginning, instructors of the academy were foreign instructors in the case of that detail understanding of the Ethiopian military doctrine and military science by foreign instructors were not as expected so that the utilization of active learning strategies in the classroom was very weak. Recently, the foreign instructors were gradually substituted by new Ethiopians instructors but on the above indicated issue they had similar limitations because they were trained by foreign instructors. In addition to this idea, the key informants of the study raised their opinion by supporting concrete example as follows. From military aspect, our country (Ethiopia) was rich in combat experience at different places and times. We have conducted different combats in many occasions these rich combat experiences were very important for military commanders to learn the strong and the weak sides of the combat experiences in order to internalize the subject matter of the lesson in Ethiopian context. However, instructors of the academy didn't use the existing experience as a source of learning during teaching their students. Instead of they lectured about I and II world war.

The second limitations were related to commandants' which comprised of their controlling mechanisms (systems).It means that the teaching-learning process of the academy should be controlled and assessed by commandants of the academy on the right time and should provide feedback for instructors and students. Finally, they should also take corrective measures on time. But the key informants reported that the controlling system of commandants' of the academy was surface assessment and the feedback was weak. The third limitation was student related.

Those who graduated from the academy had lack of English language, shortage of detail understanding of the Ethiopian military doctrine and military science and they had also limitation on current military technological instruments, for instance, use of computer, internet and different military soft wares about war gaming simulations.

This indicates that, there were some shortages in the teaching learning process, particularly in the effective implementation of active learning instructional approaches in the academy in order to achieve the objectives of the Ministry of Defense. Supporting this evidence, one of the commandant's described this as follows:

> *I think that the implementation of active learning instructional approaches had its Own limitation, which means there is misunderstanding of both instructors and students even commandants about the new approach (active learning). For example, some instructors think that active learning is good for instructors to get much free time. That means much effort is expected from students but the reality is the reverse students expect every thing from their instructors. On other hand the academy, is ready to apply active learning approach in the academy by inviting experts (guest speakers) from civilian universities and give on job training, work shop, panel discussion concerning active learning instructional methods. However, it is not enough to change the methodology. Still there is limitation on the implementation of the new approaches in general in the view that objectives of MoND is realized with some limitations...*
>
> *Interview Com-1 (March, 7 2013)*

These misconceptions show that teachers have not understood that active learning enables them to spend more time with groups and individuals to give access to special needs of students and contribute to a better and quality learning. In line with this finding, Frazee et al. (1995:80) states that the training of teachers is a crucial factor among other factors that affect the implementation of active learning. Because the teacher is the final decision maker as regard to the actual learning opportunities provided to the students.

From this analysis, it is possible to conclude that the objective of MoND could be implemented successfully, when the way of teaching approaches of the academy is changed from traditional to modern (active learning). However, the teaching approach of the academy had its own limitations to implement active learning instructional approaches effectively. As a result, the implementation of the objectives of MoND faced up with its limitations.

CHAPTER FIVE

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

On the basis of the analysis and interpretation of the data gathered through the instruments (questionnaires, interview and observation), the following summaries of the major findings, conclusions, and recommendations have been made.

5.1. Summary

The main purpose of the study was to assess how active learning methods are being implemented, at Combined Arms Academy. In order to achieve this purpose, the following specific questions were raised in the study.

1. To what extent active learning method is being utilized in the Combined Arms Academy?
2. What are the factors that affect the implementation of Active Learning?
3. How do instructors and students perceive active-learning?
4. What is the unique practice that promoting the active learning in the academy?
5. To what extent the objectives of the ministry of defense are being implemented in the way of active learning methods at the academy?

Combined Arms Academy instructors, students and commandants were the target population of the study. The population is 22 instructors, 51 students, and 3 commandants. As a result, 22 teachers and 51 students were selected using availability sampling technique

Three commandants were included in the study using availability sampling technique. The general design of this study was mixed type with quantitative supported by qualitative approach and the research design was descriptive survey.

Questionnaires, interview and observation were employed to collect the data from the sample. Before conducting the actual study, the questionnaires were piloted to check the reliability of the items. Accordingly, Cronbach alpha of item reliability was computed and relevant measures were taken on items which have low reliability. Interview was employed mainly to explore

important information on the study from the participants to strengthen the data. Observation was conducted to supplement the data obtained through questionnaires and the interview.

Quantitative and qualitative methods were used in analyzing the data obtained through the instruments. In the analyses of the quantitative data, percentages, frequencies, mean scores, standard deviations, independent t-test results were computed. In the analyses of the qualitative data, descriptive statements were used. As a result, the major findings of the study are discussed hereunder.

2.1.1. Major Finding

The following are the major findings of the study.

The Utilization of Active Learning Strategies

The analysis of the data disclosed that the level of utilizing active learning in the academy was found moderate because based on the finding the two groups' respondents confirmed that the practice of participatory, active learning instructional approach has been moderate in the academy.

- With regard to the utilization of active learning strategy employed, lecture method and group discussion methods were found to be the most frequently employed methods as reported by both groups of the respondents.
- In addition, problem solving, role play, co-operative learning method, group work, student independent work, methods have been frequently used.
- The other active learning strategy is demonstration, inquiry method, case study method, discovery method, educational visits, brain storming, peer teachings were found to be sometimes utilized in the combined arms academy.

Factors Affecting the Implementation of Active Learning

The research finding reveals that, the implementation of active learning strategies in combined arms academy was seriously affected by various factors. Those factors are presented blow.

The subjects of respondents in the two groups asserted that students and instructors the shortage of time to practice active learning in classroom and designing module are rated as the most

serious factor each by 25(35.71%), 34(48.6%) of the subjects which have been negatively affecting the implementation of active learning strategies.

Inadequacy of instructors' training on the application of active learning strategy, the wider use of continuous assessment as evaluation technique hinders active learning by inviting unfair grade , unavailability of instructional materials, large class size , instructors' belief, students' belief, diversity of students' interest, dominance of few students were rated as a serious factor by 39(55.71%), 29(41.4%), 23(32.9%), 32(45.7%), 26(37.1%), 22(31.4%), 31(44.3%), 26(37.1%)of the subjects which have been negatively affecting the implementation of active learning strategies.

Attitudes towards Active Learning

Various research findings confirmed that there is strong tie between instructors' and students' attitudes towards active learning and their effort in implementing it.

Sguazzin and Grann (1998) showed that teachers' attitudes have a great influence in the effective implementation of active learning.

In line with these ideas, eight statements for the instructors and students were included in the questionnaires with the intention of assessing their perception of active learning. Hence, it appeared that almost all of the instructors and students showed their agreement with the assumption of active learning raised in the questionnaires. It implies that, almost all of the instructors and students showed their agreement with the assumption of active learning raised in the questionnaires. The level of their agreement with the assumptions of active learning shows us that the instructors and the students have perceived active learning positively.

Practices that Promoting Active Learning Strategies

The analysis of the data disclosed that some teaching practices had been uniquely implemented and promoted active learning in the academy. These practices are:

- Involving students in doing practical exercise/war gaming and thinking about the exercise they are doing on the maps, on sand model and in the field
- Using students as resources
- Encouraging learning by doing
- Taking responsibility for ones own learning
- Encourage students to work together in their learning
- Giving choice to students. In addition, the efforts have been made to enhance the knowledge and skills of instructors about the new system of instructions by commandants of the academy (positive reactions of stakeholders to wards active learning approaches).

Implementation of the Objectives of the Ministry of National Defense in the way of Active Learning Teaching Methods in the academy

The data obtained from the interview and open-ended questions about the objective of the ministry of defense is being implemented in the way of active learning teaching methods shows that, the objective of MoND should implemented successfully, when the way of teaching approaches of the academy changed from traditional to modern (active learning). However the teaching approach of the academy had its own limitations to effectively implement active learning instructional approaches. The major limitations are:

- Instructors related limitations that are shortage of detail understanding of the Ethiopian military doctrine and military science.

- Commandants' related limitations: teaching-learning process of the academy should be controlled and assessed by commandants of the academy on right time and provide feed back and taking correction measures on time. However, research finding shows that the controlling system of commandants' of the academy was surface assessment and weak feed back.

- Student related limitations those, who graduated from the academy, lack of conversation English language, shortage of detail understanding of the Ethiopian military doctrine and military science and also limitation in current military technological instruments, for instance, use of computer, internet and different military soft wares about war gaming simulations.

2.2. Conclusions

Based on the major findings, the following conclusions were drawn:

- With regard to the level of utilization of active learning methods, lecture, group discussion, problem solving, role play, co-operative learning method, group work, and student independent work methods were found to be the most frequently employed methods of teaching as compared to the others (demonstration, inquiry method, case study method, discovery method, educational visits, brain storming, peer teachings). This reveals that, the level of utilization of active learning strategies in the academy was moderate. It is possible to infer that the implementation of active learning strategies in combined arms academy was fairly good.
- Regarding to the factors that affects the implementation of active learning: shortage of time to practice active learning in classroom and designing module were the most serious factors and inadequacy of instructors' training on the application of active learning strategy, the wider use of continuous assessment as evaluation technique hinders active learning by inviting unfair grade, unavailability of instructional materials, large class size, instructors' belief, students' belief, diversity of students' interest, dominance of few students were rated as a serious factors that affecting the implementation of active learning in the academy.
- Regarding to the attitude to wards active learning the research finding revealed that the grand means of respondents 3.83. It implies that, almost all of the instructors and students showed their agreement with the assumption of active learning raised in the questionnaires. The level of their agreement with the assumptions of active learning shows us that the instructors and the students have perceived active learning positively.
- The objective of MoND should implemented successfully, when the way of teaching approaches of the academy changed from traditional to modern (active learning). However, the teaching approach of the academy had its own limitations to effectively implement active learning instructional approaches. Those are:

Shortage of detail understanding of the Ethiopian military doctrine and military science by instructors and students, controlling system of commandants' of the academy was surface assessment and weak feed back, graduated students lack of English language, limitation in current military technological instruments, for instance, use of computer, internet and different military soft wares about war gaming simulations. This shows that, the implementation of the objectives of MoND had faced up its limitations.

2.3. Recommendations

On the basis of the findings and the conclusions drawn, the following recommendations were forwarded.

1. The background information of the instructors showed that 100% of them had first degree. It showed that, the minimum requirement of educational level in the academy. Therefore, it is advisable that;
   - The college staffs shall endeavor to attain the required level of qualification/competence and expertise in their respective discipline; and maintain and improve such competence and expertise by keeping abreast with the new developments and changes in their respective fields of study. So, training main department and commandants of the academy should focus on the required level of qualification of instructors and their development.
2. As the finding of the study revealed, the level of utilizing active learning strategies in Combined Arms Academy was moderate. It showed that the level of exercising different active learning strategies in the academy was not adequate. Thus, it is advisable that teachers should:
   - able to provide the situations that encourage the learners to ask questions, examine their assumptions, and formulate theories of their own. This can be realty if the teachers work in small groups and assess their learning, and above all, if the teachers ensure that the learning environment is fun, supportive and personally engaging.
3. The result of this study revealed that shortage of time to implement active learning in academy was the most serious problem (factor). Thus, the commandants of the academy should adjust different mechanism to improve this problem by:
   - planning less crowded and largely activity-based curricular materials
   - avoiding bulky contents and redundancy
   - appropriately budgeting the allotted time and implementing as intended

4. The study revealed that designing module was the most serious factors in the academy. Teaching material development should not be the task of one or two experts. It should be the result of cooperative effort of different knowledgeable and skilled professionals. Pedagogical, language and subject editors should be involved in the process of designing of teaching modules. Therefore, the module writers should include activities, exercises, group works, pair works, debating during the design of the modules since instructional materials have a great role in the implementation of active learning.
5. To achieve the objectives of the MoND, the commandants and teachers should focus on the development of language skills of students; prepare appropriate documents on the Ethiopian military doctrine and military science as basic teaching materials in the Ethiopian contexts.

REFERENCE

Aggrawal J.C (1996). *Principles, Methods and techniques of teaching*. Delhi: Vikas publishing House.

Alexander, Robin (2001). *Culture and Pedagogy*: International Comparisons in Primary Education. Oxford: Blackwell.

Alexander R (2006). *Towards Dialogic Teaching: Rethinking Classroom Talk, 3rd edition.* New York: Dialogos.

Alexander R (2008, April). *Education for All, the Quality Imperative, and the Problem of Pedagogy*. Create Pathways to Access Monograph No. 20. London: University of London Institute of Education.

Amare Asgedom. (2000*). An Andragogic Approach to Teaching and Learning*. New York: Brooks/Cole Publishing.

Amenu Oljira .(2005). The Implementation of Active Learning Approach in the Teacher College of Oromia. M.A Thesis (Unpublished)

Barr, R.B. and Tagg, J. (1995*). From teaching to learning*: A paradigm for under graduate education, Retrieved on November 05/011/2012 from http://ilte.ius.edu/pdf/barr.pdf.

Barrow K, Boyle H, Ginsburg M, Leu, E, Pier D, Price-Rom A (2007). Cross-National Synthesis of Educational Quality Report No. 3: Professional Development and Implementing Active-Learning, Student-Centered Pedagogies. Washington, DC: EQUIP Research Report. Available at: http://www.equip123/EQUIP1/publications

Bennet, et. Al. (1996). *Researching in to Teaching Methods in Colleges and Universities.* London: Kogan Page.

Best, J.,& Kahn,J.(1998). Research in Education (8th ed.): Allyn and Bacon.

Biadgelign Ademe. (2010). *General Learning-Teaching Methods and Techniques*. Addis Ababa: Addis Ababa University Press.

Bigge, M. L & Shermis, SS.(2004). *Learning Theories for teachers (6th ed)*. London: Pearson education Inc.

Bon Well & Eison, A.(1991). *Active Learning: Creating Excitement in the class-room.* ERJC learning house on Higher Education. London: Loutledge Falmar.

Bonwell, C and Elison, A. (2003). *Active Learning Creating Excitement in the Classroom.* Rhen: Grips.

Borich, G. D. (1984). *Effective Teaching Methods.* New York: Macmillan Publishing Company.

Boyle, H. (2006). *Memorization and Learning in Islamic Schools.* Comp. Educ. Rev. 50 (3): 478-95

CAA . (2011). *Revised Curriculum*: Addis Ababa.

Capel, et. al. (1995). *Learning to Teach in the secondary Schools.* London: Rutledge.

Calahan, J. et. al. (1988). *Teaching in the Middle Secondary Schools*: Planning for Competence, New York: Macmillan.

Chet, et. al. (1993). *Promoting Active-learning Strategies for the College Classroom.* Sanfransisco:Jossey. Base Chickering AW, Gamson ZF. March 1987 Seven Principles for Good Practice. AAHE Bull. 39 3-7.

Cindy E. Hmelo-Siler. (1998). Goals and Strategies of Problem-Based Learning Facilitator.

Cresswell, J.W. (2009). *Research Design: Qualitative, Quantitative and Mixed Approaches.* Los Angeles. CA, Sage.

Dary, N. and Terry, E. (1993). *Reforming Open and Distance Education: Critical Reflection Practice.* London: Kogan Page.

de Baessa Y, Chesterfield R, Ramos T. (2002).*Active Learning and Democratic Behavior in Guatemalan Rural Schools.* Compare 32 (2): 205-18.

Defense University College. (2007*). Changing Knowledge in Success.* Working Document for Five year Strategic Plan: Oromia Regional State.

Derebssa Duffera .(1999). *Principles of Curriculum Design and Development.* Addis Ababa, A.A.U (Distance Education Material).

Derebssa, D. (undated.). *Quality of Teaching and Learning in Ethiopian Primary Schools: Tension Between Traditional and Innovative Teaching-Learning Approaches.* Retrieved from http://home.hiroshimaa.u.ac.jp/cice/paper68.pdf10/02/2013.

Dewey J. (1938). *Experience and Education.* New York: Macmillan.

Dochy, F., Segers, M., Van den Bossche,P., & Gijbels,D. (2003).*Effects of problem-based learning:* A meta analysis.Learning and instruction, 13, 533-568.

Duch, B.J., Groh,S.E., & Allen, D.E. (2001). *Why problem-based learning? A case study of Instructional change in under graduate education.*

Eggen, P.D and D.P. Kauchax. (1996). *Strategies for Teachers: Teaching Content and Thinking Skills*. Boston: Allyn and Bacon.

Evans, L. and Abbott, I. (1998). Teaching and Learning in Higher education London and New York , Redwood books publisher.

Felder, D. (2000). *Active Learning and Cooperative Learning.* URL http://www.honolulu,hawail.edu/intrant/teachtip.htm.

_____ Active Learning on the web.www. neiuedu/dbehrile.hrd.408/glossary.htm

FDRGE .(1994). Education and training Policy: Addis Ababa.

FDRE . (2002). *Policy Implementation Strategy of Capacity Building of Ethiopia, Ministry of Information*: Addis Ababa.

FDRE . (2002). *Foreign Affairs and Security Policy Strategy of Ethiopia*, (MOI), Printing Press Addis Ababa.

Firidissa Jebessa. (2005). *Active Learning Versus the Traditional Methods of Teaching at Higher Education Institutions*: A Case Study of Learners preferences at the Department of Business Education, Addis Ababa University. *The Ethiopian Journal of Education*, Volume xxv (1), 49- 77

Firidissa Jebessa. (2010). Action research practice in teaching English as a foreign in Ethiopian Universities; implication for quality Learning Teaching: Ethical consideration in the research work, (pp.158-161).

Frazee, M.B. et. al . (1995). *Integrated Teaching Methods*: Theory Classroom Approach., and field based Connections New York: Mc Graw Hill Inc.

Fry, H., Ketteridge, S. & Marshall, S. (2003). *Understanding students learning.* In Fry H., Ketteridge S. & Marshall S. (Eds), Brining Problem-based Learning to higher Education: Theory and Practice. New direction in Teaching & Learning. No. 68, Winter 1996 (pp.13-21).

Gay,L.R.& Arasian, p. (2000).*Educational Research:* Competencies for Analysis and Application (6^{th} ed). Columbus: Merrill.

Gijselaers,W.H. (1996). *Connecting Problem-Based Practice with Educational theory.* In L.Wilkerson &W.

Gijselaer (Eds.), *Bringing Problem-Based Learning to Higher Education*: Theory and Practice. New Direction in Teaching and Learning. No.68, Winter 1996 (pp. 13-21). San Francisico: Jossey Bass.

Goodlad,J.I.(1984). *A Place called School. Prospective for the Future*. Policy New York; McGraw Hill.

Guthrie. G. (1990). *To the Defense of Traditional Teaching in Lesser- Developed Countries.* In Val Rust and Per Dalin (eds.) Teachers and Teaching in the Developing World, New York: Garland Publishing. pp. 219-32.

Hayes, N. (2000). *Doing psychological Research Buckingham:* Open University Press.

Hmelo-Silver, C.E (2004*). Problem-Based Learning:* What and how do students learn? Educational Psychology Review, 16(3), 235-266.

ICDR. (1999). *Teacher Education Hand Book.* Addis Abba Finfine Printing and Publishing.

In B. Duch,S Groh, & Allen, (Eds.),*The power of problem- based learning (pp.3-11*). Sterling, VA: Stylus.

Kaplan. (1990). *Psychology of Education Tomorrow's Teachers London*: McGraw Hlill.

Kaplan. (1998). *Spatial Dynamics:* An Alternative Teaching Tool in Social Study.

Knowles, M. S. et al (1984). *Andragogy in Action.* Applying modern principles of adult Education, San Francisco: Jossey Bass.

Knowles, M. S. (1980). The *modern practice of adult education*: *From pedagogy to Andragogy.* Chicago: Follett.

Knowles, M. S. (1984). *Andragogy in action.* San Francisco: Jossey-Bass.

Knowles, Malcolm S. and Associates . (1984). *Andragogy in action*: Applying modern.

Koul, L. (2008). *Methodology of Educational Research.* (3rd ed.). New Delhi: Vikas Publishing Agency.

Koul, L. (1996). *Methodology of Educational Research.* New Delhi: Vikas Publishing House Pvt. Ltd.

Kyriacou, C. (1998*). Essentials of Teaching Skills (2nd ed*) London: Nelson Thornes.

Lemma Dadi . (2006).Application of Learner-Centered Methods in Government School Second Cycle Primary School of East Shoa Zone. MA Thesis AAU. (Unpublished)

Leu, E. (1998) .*Designing Integrated Curriculum Materials for Primary Education*: a Paper Presented at the Workshop in Oromia Education Bureau. (Unpublished)

Leu, E .(2000).*The Role of Curriculum Integration in Basic Education Tigrai Education Bureau*. (Unpublished)

Lewy, A. (1979). *Hand Book of Curriculum Evaluation*. UNESCO Paris.

Macharia, S. N. and Waria L.M. (1994). *Teaching Practice in Primary Schools*. Hong Kong:Macmillan Publishing Company.

Macharia, S. N. and Waria L.M. (1994). *Teaching Practice in Primary Schools*. Hong Kong: Macmillan Publishing Company.

Mayer, R. (2004). *Should there be a three-strikes rule against pure discovery learning*? The case for guided methods of instruction. Am. Psychol. 59 (1):14-19

McKeachie, W.J Teaching Tips; Strategies, research and Theory for college and university Teachers Boston; Houghton Mifflin, 1999b.

Mehari Ymulaw. (20007). Modules and Active Learning: Modules of General Biology I (Bio111) of the Abbiyi Addi the College of Teacher Education .the Ethiopian Journal of Education Vo.XXVII No.1 June 2007.

Merriam, S.B & Caffarella, R.S (1999). *Learning in Adulthood; A comprehensive guide (2nd ed)* . San Fransico; Jossey-Bass.

MoE. (1994). Education and training policy: ST. George printing press. Addis Ababa

MoE. (2002). *Educational Sector Development Program (ESDPII)*. Addis Ababa.

MoE. (2003/04). *Higher Diploma Program for Educators course book* (Unpublished).

MoE. (2004b). *Higher Education System Overhaul (HESO): Report of the Committee of Inquiry Governance, Leadership and Management in Ethiopia's Higher Education System*. Addis Ababa.

MoND. (1998): *Ethiopian Defense Training policy*. The Ministry of the National defense, Addis Abeba

Mutassa, N.G. and Wills G.M. (1995). *Modern Practice in Education and Science*. Gaborone. Bostwara.

Namasthaka et. al. (2000). *Teacher Training Resource Hand Book*: Innovative Approach to Teaching and Learning. Malawi: Save Children Fede

Nardos Abebe .(2000). *Issues and Methods and Materials in Teaching Primary School Subject Addis Ababa.* AAU. National Commission on Education (1983), A Nation at Risk, Washington, D.C., U.S. Department of Education.

Obanya, P., Shabani, J. and Okebukela, P. (1996). *Guide to Teaching and Learning in Higher Education.* Dakar: UNESCO

Peter, S, et .al., (2000*). Problem Based Learning Case Studies Experience and Practice.* London: Konan Page Ltd.

Plass, H. (1998). *"The Learner- Centered Classroom" Quality Education.*

Piaget, J. (1969). *Science of Education and the Psychology of the Child. London*: Longman.

Price-Rom A, Sainazarov K .(2009). *Active-Learning Pedagogies as a Reform Initiative*: The Case of Kyrgyzstan." Washington, DC: American Institute for Research. http://www.equip123.net/docs.

Ramdsen, P. (2003). *Learning to teach in higher education (2nd ed.).* New York. Rutldge father. Rogers C (1969). Freedom to Learn. Columbus, OH: Charles Merrill.

Ranson, s. (1996). Towards a theory of learning, *British Journal of education studies, 44(1), 9-26.*

Sarvey, J.R . (2006). *Overview of problem-based learning: Definition and distinction.* The Interdisciplinary Journal of Problem-based learning,1, (1), 9-20.

Silberman, M. (1996). Active *Learning: 101 Strategies to Teach any Subject*. Boston: Allyn and Bacon.

Smith, P. and Blake, D. (2005). *Facilitating Learning Through Effective Teaching: At a Glance* Australia: NCVER Publication.

Spring, J. (2006). *Pedagogies of Globalization:* The Rise of the Educational Security State. Mahwah, NJ: Lawrence Erlbaum Associates.

Squazzin, T. and Grann, M.V. (1998). *Education Reform and Innovations in Namibia.* Okahandja: Namibia.

Taye Geressu. (2008). Perceptions and Practices of Active Learning in Dilla University. M.A Thesis (Unpublished)

Tapscott, D. (2009). *Groun up digital: How the net generation is changing your world.* New York :McGraw Hill.

TESO (2003). *Teacher Education System Overhaul Programme*. Addis Ababa.

Temecheqn Engida (2002). *Teaching Primary School Subject Using Learner- Centered Methodology in the Ethiopian Journal of Educational Researchers Association* Vol. 1No. 1. Addis Ababa. EERA.

Transitional Government of Ethiopia (1994) New Education and Training Policy (NETP) Addis Ababa.: EMPDA.

____ (1994). *Education and Training Policy. (1st ed.)*. Addis Ababa: St. George Printing Press.

Torp, L.,& and Sage, S. (2002). *Problems of Possibilities; Problem-Based Learning for K- 16 Education* (2nd ed.).Alexanderia, VA; Association for Supervision and Curriculum Development.

Torney-Purta ,J. (1999). *Civic Knowledge and Engagement among 14- year-olds in 23 European Countries, 2 Latin American Countries, Hong Kong, Australia and the United States.* Hamburg, Germany: IEA Data Processing and Research Center.

Transitional Government of Ethiopia. (1994). *New Education and Training Policy* (NETP) Addis Ababa.: EMPDA. Ration, Inc.

Vanderstope, S. W. and Johnston, D.D. (2009). *Research Method for Every day Life :Belending Qualitative and quantitative Approaches.* San Francisco: John Wiley &Sons, Inc

Vygotsky, L . (1962). Mind and Society. Cambridge, MA: MIT Press.

Watkins D (2007). Comparing Ways of Learning in Mark Bray, Bob Adamson, and Mark Mason (eds.) Comparative Education Research: Approaches and Methods. Hong Kong: Comparative Education Research Centre and Springer. pp. 299-313

Wikipedia (2008). *Constructivism (Learning Theory)*. Retrieved 4 April from http://en.wikipedia.org/wiki/Constructivism_(learning_theory).

Williams, D.P., Woodward,J.R., Symons,S.L., & Davies, D.L. 2010). A tiny adventure: The introduction of Problem- based learning in an undergraduate chemistry course. *Chemistry Education Research and Practice*, 11, 33-42.

Wittrock, M. (1979). *The Cognitive Movement in Instruction*. Educ. Res. 8 (2):5-11.

Yalew Endaworke .(2004). Teachers' beliefs, Knowledge and practice of Learner centered approach in school of Ethiopia. the *Ethiopian Journal of Education* 24(2), 17-39.

APPENDIX

Appendix 1

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDY

INSTITUTE OF EDUCATIONAL RESEARCH AND DEVELOPMENT

Questioner to be filled by Instructors

The objective of this questionnaire is to collect information regarding the practices and problems of the implementation of active learning in Combined Arms Academy. The questionnaire is designing to assess the implementation of active learning approach by instructors in their teaching and their views in the teaching learning process. The success of this study will highly depend on the quality of your response and I hope you will give accurate and honest responses to the items presented. Your response will be kept confidential and used only for this academic purpose. I would like to express my heartfelt thanks and appreciation for your time and sincere cooperation to fill this questionnaire.

Thank you in advance

General instruction:
Please, do not write your name on the questionnaire
Please, follow the directions given in each part.

Part I. Background information

1. Campus ----------Department/Section----------

2. Sex: Male ☐ Female ☐

3. Educational Level: BA/BSc ☐ MA/MSc ☐

4. Teaching experience in year: < 2 ☐ 2-5 ☐ 6-10 ☐ 10 and above ☐

5. Have you taken pedagogy course? Yes ☐ No ☐

6. Rank: Captain ☐ Major ☐ Lieutenant-Colonel ☐ Colonel ☐

7. Service years in the Army: 15-20 21-25 ☐ 26-30 ☐ 31 and above ☐

8. Age: 35-40 ☐ 41-45 ☐ 46-50 ☐ 51 and above ☐

Part II

Instruction 1: This part of the questionnaire has 1.1 - 1.14 items related to **your practices of different active learning Strategies are listed below**. Please indicate the extent to which you use them in your classroom and rate according to the following scale.

Key: 5 = Always

4 = Frequently

3 = Some times

2 = Rarely

1 = Not at all

1. How often do you use these active learning strategies?

N0	How often do you use these active learning strategies	5	4	3	2	1
1.1	Lecture/ explanation					
1.2	Problem solving method					
1.3	Role-playing					
1.4	Group Discussion /syndicate					
1.5	Brain storming					
1.6	Peer Teaching					
1.7	Cooperative learning					
1.8	Educational visits/field trip					
1.9	Group work					
1.10	Demonstration					
1.11	Student independent work by giving homework/ assignments					
1.12	Inquiry method					
1.13	Case study					
1.14	Discovery method					

Part III.

Instruction 2: This part of the questionnaire has 10 items. It assessing to what extent have the following **factors hindered your use of active learning methods** in your class room Please, rate them from "serious" to "not serious" based on the seriousness of the problem and use tick "√" mark to indicate your response.

Key: 4 = Most serious
3 = Serious
2 = Undecided
1 = Not serious

No	Factors Affecting Implementation of Active learning	4	3	2	1
2	Inadequate of Instructors' training on the application of active learning strategy				
3	The wider use of continuous assessment as evaluation technique hinders active learning by inviting unfair grade				
4	Unavailability of instructional materials (reference text books, modules, teaching aids)				
5	Shortage of time to practice active learning in classroom				
6	Large class size				
7	Instructors' belief and perception				
8	Students' belief and perception				
9	Diversity of students' interest				
10	Some students' dominance during group activities				
11	The design of the teaching module				

Part IV

Direction 3: This part of the questionnaire has 8 items related **to instructors' perception/ Attitude to ward active learning**. Please indicate the extent to which you agree or disagree regarding active learning in general using tick (√) mark. (Use the following scales)

5= strongly agree

4= Agree

3= Undecided

2= Disagree

1 = strongly disagree

No	Items	5	4	3	2	1
12	The quality of education can be improved if teachers shift their instruction from the lecture methods to active learning approach					
13	Active learning enhances students level of understanding and involves them in problem solving					
14	Active learning creates the opportunities to share experiences and encourage friendship among students.					
15	Teaching is the sole responsibility of teachers					
16	Active learning decrease students and teachers work loads and save time.					
17	Active learning frustrates behavior of students					
18	Active learning enhances active involvement students in learning in stead of passive listening.					
19	Active learning enhances self-confidence and independence learning of students.					

Part VI

Instruction 4: This part of the questionnaire has 14 items related **to teaching Practices that Promote Active Learning. Please specify whether** the teaching practices happen or not in your classroom. The practices will be marked in the category of **Yes (√) No (X)** mark next to each item.

No	Teaching practices	Yes	No	Uncertain
20	Involving students in doing Practical exercise/war gaming and thinking about the exercise they are doing on the map, on sand-model, in the field.			
21	Encouraging students to learn with all their sense of sight, smell, test, hearing and toughing			
22	Focusing on critical thinking teaching method			
23	Encouraging learning by doing			
24	Employing case study method and guided design			
25	Encourage students to work together in their learning			
26	Encouraging students to formulate theories of their own			
27	Taking responsibility for your own learning			
28	Focusing on process of student learning, not just the content of the discipline			
29	Teaching learners how to learn with out a teacher			
30	Provision for individual differences			
31	Using students as resources			
32	Giving choice to students			
33	Encouraging speech in class room			

If there are any other practices, please specify _____

_____

_____

Direction 5: Your view in terms of active learning approaches

1. Please list your most commonly used teaching approaches?

---

2. What factors negatively affect the implementation of active-learning approaches?

---

3. What is the unique opportunity (practice) for promoting the active learning in your academy?

---

4. To what extent the active- learning approaches realize the objectives of the Ministry of Defense?

---

5. What possible strategies you propose to develop more positive attitude to wards active learning?

Thank you!

Appendix 2

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDY

INSTITUTE OF EDUCATIONAL RESEARCH AND DEVELOPMENT

Questioner to be filled by Students

The objective of this questionnaire is to collect information regarding the practices and problems of the implementation of active learning in Combined Arms Academy. The questionnaire is designing to assess the implementation of active learning approach by students in their learning and their views in the learning process. The success of this study will highly depend on the quality of your response and I hope you will give accurate and honest responses to the items presented. Your response will be kept confidential and used only for this academic purpose. I would like to express my heartfelt thanks and appreciation for your time and sincere cooperation to fill this questionnaire.

Thank you in advance

General instruction:

Please, do not write your name on the questionnaire

Please, follow the directions given in each part.

Part I. **Background information**

1. Batch: first year ☐ second year ☐

2. Sex: Male ☐ Female ☐

3. Educational level: BA/BSc ☐ Diploma ☐ 12^{th} ☐

4. Rank: Captain ☐ Major ☐ Lieutenant-Colonel ☐ Colonel ☐

5. Service years in the Army: 15-20 ☐ 21-25 ☐ 26-30 ☐ 31 and above ☐

6. Age: 30- 35 ☐ 36--40 ☐ 41-45 ☐ 46-50 ☐ 51 and above ☐

Part II:

Instruction 1: This part of the questionnaire has 1.1 - 1.14 items in terms of assessing the extent of **your participation in active learning** in your classroom. Please, provide appropriate responses using tick "√" mark in front of the corresponding items.

Key: 5 = Always

4 = Frequently

3 = Some times

2 = Rarely

1 = Not at all

1. How often do you participate in these active learning strategies?

No	How often do you participate in these active learning strategies?	5	4	3	2	1
1.1	Lecture/ explanation					
1.2	Problem solving method					
1.3	Role-playing					
1.4	Group Discussion /syndicate					
1.5	Brain storming					
1.6	Peer Teaching					
1.7	Cooperative learning					
1.8	Educational visits/field trip					
1.9	Group work					
1.10	Demonstration					
1.11	Student independent work by giving homework/ assignments					
1.12	Inquiry method					
1.13	Case study					
1.14	Discovery method					

Part III.

Instruction 2: This part of the questionnaire has 10 items. It assessing **to what extent have the following factors hindered your use of active learning methods** is your class room Please, rate them from "serious" to "not serious" based on the seriousness of the problem and use tick "√" mark to indicate your response.

Key: 4 = Most serious

3 = Serious

2 = Undecided

1 = Not serious

No	Factors Affecting Implementation of Active learning	4	3	2	1
2	Inadequate of Instructors' training on the application of active learning strategy				
3	The wider use of continuous assessment as evaluation technique hinders active learning by inviting unfair grade				
4	Unavailability of instructional materials (reference text books, modules, teaching aids)				
5	Shortage of time to practice active learning in classroom				
6	Large class size				
7	Instructors' belief and perception				
8	Students' belief and perception				
9	Diversity of students' interest				
10	Some students' dominance during group activities				
11	Designing module				

Part IV

Direction 3: This part of the questionnaire has 8 items related to **Students' perception/ Attitude to ward active learning**. Please indicate the extent to which you agree or disagree regarding active learning in general using tick (√) mark. (Use the following scales)

5 = Strongly agree

4 = Agree

3 = Undecided

2 = Disagree

1 = strongly disagree

No	Items	5	4	3	2	1
12	The quality of education can be improved if teachers shift their instruction from the lecture methods to active learning approach					
13	Active learning enhances students level of understanding and involves them in problem solving					
14	Active learning creates the opportunities to share experiences and encourage friendship among students.					
15	Teaching is the sole responsibility of teachers					
16	Active learning decrease students and teachers work loads and save time.					
17	Active learning frustrates behavior of students					
18	Active learning enhances active involvement students in learning in stead of passive listening.					
19	Active learning enhances self-confidence and independence learning of students.					

Part VI

Instruction 4: This part of the questionnaire has 14 items related **to teaching practices that promote active learning. Please specify whether** the teaching practices happen or not in your classroom. The practices will be marked in the category of **Yes (√) No (X)** mark next to each item.

No	Teaching practices	Yes	No	Uncertain
20	Involving students in doing Practical exercise/war gaming and thinking about the exercise they are doing on the map, on sand model, in the field.			
21	Encouraging students to learn with all their sense of sight, smell, test, hearing and toughing			
22	Focusing on critical thinking teaching method			
23	Encouraging learning by doing			
24	Employing case study method and guided design			
25	Encourage students to work together in their learning			
26	Encouraging students to formulate theories of their own			
27	Taking responsibility for your own learning			
28	Focusing on process of student learning, not just the content of the discipline			
29	Teaching learners how to learn with out a teacher			
30	Provision for individual differences			
31	Using students as resources			
32	Giving choice to students			
33	Encouraging speech in class room			

If there are any other practices, please specify _____

_____

Direction 5: Your view in terms of the active learning approaches

1. Please list your most commonly used approaches of learning?

---

2. What factors negatively affect the implementation of active-learning approaches?

---

3. What is the unique opportunity (practice) for promoting the active learning in your academy?

---

4. What possible strategies you propose to develop more positive attitude to wards active learning?

Thank you!

Appendix 3

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDY

INSTITUTE OF EDUCATIONAL RESEARCH AND DEVELOPMENT

Interview Guides to Commandants of the Academy

1. Do you think that instructors have an adequate training and prior experience and understanding of active learning?
2. To what extent the active- learning approaches realize the objectives of the Ministry of Defense?
3. What factors negatively affect the implementation of active-learning approaches?
4. How do you judge the attitude of the teachers and students to wards the active learning approach?
5. What is the unique opportunity (practice) for promoting the active learning in your academy?
6. What possible strategies you propose to develop more positive attitude to wards active learning?

Thank you!

Appendix 4

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDY

INSTITUTE OF EDUCATIONAL RESEARCH AND DEVELOPMENT

Interview Guides to selected Instructors

1. What do you know about active learning? Do you familiar with active learning?
2. Do the commandants of the academy prepare work shop regarding active learning?
3. Do you practice active learning strategy in your classroom? If yes, mention some of the strategies you employ.
4. What factors negatively affect the implementation of active-learning approaches in your class room?
5. How do you judge the attitude of the teachers and students to wards the active learning approach?
6. What is the unique opportunity (practice) for promoting the active learning in your academy?
7. What possible strategies you propose to develop more positive attitude to wards active learning?

Thank you!

Appendix 5

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDY

INSTITUTE OF EDUCATIONAL RESEARCH AND DEVELOPMENT

Interview Guide to selected Students

1. What do you know about active learning? Do you familiar with active learning?
2. How often your instructor did employed group work, discussion, discovery method, and educational visit? If not why?
3. Do you think that students are interested to participate in group work? If not why?
4. What major problems do you think affect the implementation of active learning?
5. How do you judge the attitude of the teachers and students to wards the active learning approach?
6. What is the unique opportunity (practice) for promoting the active learning in your classroom?
7. What possible strategies you propose to develop more positive attitude to wards active learning?

Thank you!

Appendix 6

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDY

INSTITUTE OF EDUCATIONAL RESEARCH AND DEVELOPMENT

The main purpose of this observation checklist is to assess the activities practiced in the classroom in relation to the implementation of active learning. The activities will be marked in the category of **Yes(√) No** (X) on the basis of whether they happen or not in the classroom.

Classroom Observation Check list for Active learning practices.

Part I.

General Information

Name of the Academy ---------- date ----------time begin ----------

Lesson being observed ----------time end----------

Number of students in the class: ----------

Part II

No	List of Observation	1st 20'		2nd 20'	
1.	**Classroom condition**	Yes	No	yes	No
1.1	Is there enough sitting space for all students?				
1.2	Are the seats movable?				
1.3	Is the classroom layout arranged to facilitate active learning?				
1.4	Is there enough space for movement between desks?				
1.5	Is the class size appropriate?				
1.6	Is there group work activity?				
1.7	Are the desks arranges in straight row?				
1.8	Is the number of students and class size appropriate?				
2	**Instructors' Activity in the classroom**	Yes	No	Yes	No
2.1	Arranging students for different classroom activity				
2.2	Clarifying the learning objective				
2.3	Giving direction about the procedures and activities				
2.4	Using different instructional methods to implement active learning.				
2.5	Encouraging students to become active participant				

2.6	The instructor is more active than the students				
2.7	The instructor is active in explaining, monitoring and describing				
2.8	Managing the class for active learning implementation				
2.9	Using an exercise to elicit students' ideas knowledge and skill				
3	**Student Activities During the Lesson**	Yes	No	Yes	No
3.1	Students are participating in problem solving activities				
3.2	Students are playing roles				
3.3	Students are discussing issues in groups				
3.4	Students are taking part in peer teaching				
3.5	Students are practicing demonstration				
3.6	Students are Involving in doing Practical exercise				
4	**Utilization of Instructional Material**	Yes	No	Yes	No
4.1	Are there charts, posters, diagrams?				
4.2	Does the teacher use these instructional materials other than books?				
4.3	Does the teacher illustrate ideas, concepts or points with the help of different instructional materials?				
5	**Class Evaluation**	Yes	No	Yes	No
5.1	Instructor gives group work; ask questions gives exercises for the learners				
5.2	Instructor follows up students' participation and activities				
5.3	Instructor elicits response from learners instead of supplying answers				
5.4	Instructor evaluates students' group cooperation				
5.5	Instructor checks and gives constructive feed back to the students' work				
5.6	Students are listing passively during the lesson.				
6	**Out of classroom (pedagogical resource center and libraries)**	Yes	No	Yes	No
6.1	Is there pedagogical center?				
6.2	Does it have enough facility?				
6.3	Does it have expert support?				
6.4	Is there a library?				
6.5	Does it have program to students for reading?				

Appendix-7

Summary of classroom observations

Items		Yes		No	
		Yes	%	No	%
Classroom condition	Is there enough sitting space for all students?	6	100	-	-
	Are the seats movable?	2	33.3	4	66.7
	Is the classroom layout arranged to facilitate active learning?	3	50.0	3	50.0
	Is there enough space for movement between desks?	4	66.7	2	33.3
	Is the class size appropriate?	5	83.3	1	16.7
	Is there group work activity?	5	83.3	1	16.7
	Are the desks arranges in straight row?	3	50.0	3	50.0
	Is the number of students and class size appropriate?	5	83.3	1	16.7
Instructors' Activity in the classroom	Arranging students for different classroom activity	2	33.3	4	66.7
	Clarifying the learning objective	4	66.7	2	33.3
	Giving direction about the procedures and activities	1	16.7	5	83.3
	Using different instructional methods to implement active learning.	2	33.3	4	66.7
	Encouraging students to become active participant	1	16.7	6	83.3
	The instructor is more active than the students	5	83.3	1	16.7
	The instructor is active in explaining, monitoring and describing	5	83.3	1	16.7
	Managing the class for active learning implementation	1	16.7	5	83.3
	Using an exercise to elicit students' ideas knowledge and skill	4	66.7	3	33.3
Student Activities the During Lesson	Students are participating in problem solving activities	3	50.0	3	50.0
	Students are playing roles	3	50.0	3	50.0
	Students are discussing issues in groups	4	66.7	2	33.3
	Students are taking part in peer teaching	2	33.3	4	66.7
	Students are practicing demonstration	3	50.0	3	50.0
	Students are Involving in doing Practical exercise	5	83.3	1	16.7
Utilization of Instructional	Are there charts, posters, diagrams?	3	50.0	3	50.0
	Does the teacher use these instructional materials other than books?	1	16.7	5	83.3
	Does the teacher illustrate ideas, concepts or points with the help of different instructional materials?	3	50.0	3	50.0
Class Evaluation	Instructor gives group work; ask questions gives exercises for the learners	4	66.7	2	33.3
	Instructor follows up students' participation and activities	2	33.3	4	66.7
	Instructor elicits response from learners instead of supplying answers	3	50.0	3	50.0
	Instructor evaluates students' group cooperation	4	66.7	3	33.3
	Instructor checks and gives constructive feed back to the students' work	3	50.0	3	50.0
	Students are listing passively during the lesson.	4	66.7	2	33.3

Declaration

I here by declare that study is my original work done under the guidance of thesis adviser Ato Girma Lema, and has not been presented for any degree to any college that all relevant sources used are duly acknowledge.

Name: Taye Alemayehu

Signature _____

Date of submission 28/06/13

This thesis has been submitted for examination with my approval as a university adviser.

Name Girma Lema

Signature _____

Date 28/06/13