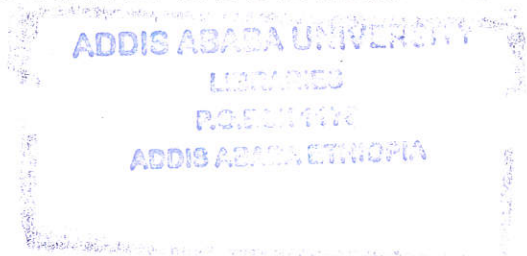


ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES



FIRST CYCLE PRIMARY SCHOOL TEACHERS'
CONCEPTION AND PRACTICE OF ACTIVE-
LEARNING METHODS IN AWI ADMINISTRATIVE
ZONE

DILNESAW BELAY BEYENE



JULY, 2009

ADDIS ABABA

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**A THESIS SUBMITTED IN PARTIAL FULFILLMENT FOR
THE REQUIREMENTS OF THE DEGREE OF MASTER OF
ARTS IN CURRICULUM AND INSTRUCTION**

DILNESAW BELAY BEYENE

JULY, 2009

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List of Acronyms and Abbreviations

- AL:** Active-Learning
- ALM:** Active-Learning Method
- CPD:** Continuous Professional Development
- FGD:** Focus Group Discussion
- ICDR:** Institutes of Curriculum Development and Research
- KETB:** Kebele Education and Training Board
- LCM:** Learner- Centered Method
- MOE:** Ministry of Education
- PTA:** Parent and Teacher Association
- SCM:** Student- Centered Method
- TCM:** Teacher Centered Method
- TESO:** Teacher Education System Overhaul
- TGE:** Transitional Government of Ethiopia.
- TTI:** Teacher Training Institutes
- USAID:** United States Agency for International Development
- WEO:** Woreda Education Offices

Abstract

The purpose of this study was to examine how active learning method of teaching has been conceived by primary school teachers and looking in to its current practice in Awi administrative zone. To accomplish the study descriptive survey method was employed. Three sample woredas were selected randomly from a total of ten woredas. The subjects in this study were teachers and principals in the first cycle primary schools. Using availability and purposive sampling techniques, teachers and principals were taken respectively from nine government first cycle primary schools. As a method of data gathering tools, questionnaire, observation, focus group discussion and interview were employed. To analyze the collected data, both quantitative (frequency, percentage, mean) and qualitative methods were on use. The result of the study revealed that teachers have relatively high understanding of active-learning method, even though, the magnitude of practicing active-learning approach is low for many problems, such as large class size, inadequacy of instructional materials, lack of school facilities and too much contents of the text books etc. The study also disclosed that teachers did not employ a variety of active-learning techniques except group work and the woreda education offices did not provide necessary support for the implementation of the method. It was then concluded that active-learning method has not be properly implemented in the sample schools, even though a considerable number of teachers do have the required understanding of the innovation. To overcome this, it is recommended that provision of sufficient instructional materials, reduction of the class size, improvement of school facilities, reduction of contents of those text books, which are bulky, provision of necessary support and reduction of the work load of teachers for effective implementation of active-learning for the concerned bodies to solve the problems, which are being obstacles in the implementation of active-learning method.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Education is a human experience acquired in the process of man's interaction with his physical and social environment resulting in the shaping of his personality by developing his understanding, self-direction, self-correction and continuous improvement and lasting insight (Azeb, 1984).

One of the ultimate aims of education is to strengthen the individual's and society's problem solving capacity and ability. People can solve different problems using education. Education enables people to identify harmful traditions and replace them by useful ones. Education does not operate in isolation; rather it has to be integrated with research, practice and development of the society. To get such a result, an appropriate curriculum that can provide quality education must be designed and implemented properly at all levels of education. In addition, the instructional methodology must realize methods that encourage the active participation of the learners (TGE, 1994).

The curriculum reform initiated in Ethiopia after the adoption of a New Education and Training Policy has led to extensive change in education. One of the changes being the paradigm shift in the model of teaching and learning, which involves the shift from rote learning to active learning and the shift from linear to integrated curricula (Lue, 1998) as cited in Yonas (2006). This change has brought a major paradigm shift in our thinking about active-learning approach, student-centered methods, problem solving, discovery learning, student sensitive learning, the use of higher order thinking skills, etc.

The implication of this is that the learning-teaching process in Ethiopian education system should be learner-centered. Because a learner-centered instruction is characterized by problem solving, student participatory and inquiry-oriented teaching and learning strategy (Borich, 1988).

In the teaching-learning process the activity of the learner counts more than the activity of the teacher as indicated in Aggarwal (1996). The principle of learning by doing is the main principle and learning is more than an individual activity. It is a social activity too. Individuals' minds are affected by the group consciously as well as unconsciously, as individuals are also influenced by friends, relatives, classmates, parents etc.

The basic rationale upon which the preference of student-centered instruction to teacher-centered instruction would include various points. Among those points: a learner-centered instructional method ensures learner preferences; interests and needs and this by implication is maintenance of equality among learner. Another important point is that learner-centered learning ensures self-fulfillment, release of potential and increase of maturity (Brands and Ginnis, 1986). In this point, they argue that learning is confluent in learner-centered methods. That is, the affective and cognitive domains flow together. The third important point is, in a learner-centered instruction, the teacher allows every learner to interact, values the views and opinions raised by learners and treats them normally. The learner-centered instruction focuses on practice and active method of learning, the skills and knowledge acquired through it, which are helpful to function in a society (Collahan and Clark, 1988).

Even though active-learning method is widely accepted and recommended by scholars and given due attention by the New Education and Training Policy, which helps to prepare learners to solve problems, makes them creative and use information from their environment and other sources to make a better life for themselves, and the society as a whole for the country; It appears that this method of teaching is not properly implemented as it is practically seen in the schools and confirmed by different research findings, which are done on the area by researchers [such as Desta,2001;Yalew,2004;Lemma,2006]at different times.

Therefore, the researcher with in this information is motivated to carry out this research, which focuses on the identification of first cycle primary school teachers' conceptions and current practice of active learning in Awi administrative zone.

1.2 Statement of the Problem

Now a day, a paradigm shift in the education system from the traditional way of teaching/mere lecturing to the modern mode of delivery is getting momentum. The issues of active-learning and continuous assessment have been addressed to maintain the quality of education. More importantly, the two strategies need to be clearly identified as they are new phenomena in our country.

Regarding this, the Education and Training Policy of Ethiopia [1994] strongly urges a radical shift to be made from the traditional transmission model of teaching to active learning pedagogy (MOE, 2002). The success of this pedagogical innovation is influenced more by what is going on in the actual classroom than by what is stated in the policy document.

As it is indicated in Yalew (2004), the philosophies, values and conceptions teachers have about the manner in which teaching-learning process should take place determine the nature of instructional methods they choose to present the lessons to their students. This implies that the conceptions teachers have about active learning methodology affects the way how they present the lessons to their students.

Therefore, the main concern of this study is to investigate first cycle primary school teachers' conceptions and practice of active learning methods in Awi administrative zone.

1.3 Objectives of the Study

General objective

This study is aimed at identifying the conception and practices of first cycle primary school teachers towards active-learning methods in Awi zone.

Specific objective

The specific objective of this study is to identify those factors that affect the use of active-learning methods of teaching in the Zone

With these objectives, thus, the following research questions are formulated to be answered in the course of the study.

1. How do first cycle primary school teachers conceive active-learning methods?
2. How are first cycle primary school teachers practicing active-learning methods in Awi Zone?
3. What factors affect the implementation of active-learning methodology?

1.4 Significance of the study

The findings of this study would be significant to teachers for it will enhance their involvement in using active learning methods of teaching. It is also important to administrators, practitioners of the zone and policy

makers to be aware of and act accordingly. Moreover, the finding would be important to other researchers who are interested to undertake further research on the issue at national level.

1.5 Delimitation of the study

In order to carry out any research, it is important to delimit the scope of the study to manageable size. Accordingly, the scope of this study was delimited to explore teachers' conception of active-learning methods and its current practice in the first cycle government primary schools in Awi Zone.

1.6 Limitation of the Study

Active-learning is a relatively new phenomenon in Ethiopia. Thus, locally written literature particularly on conception of teachers about active learning method is scarcely available. This limited the researcher so as not to supplement the study with literature reviewed on the Ethiopia context exhaustively.

The study did not include private, public and non-government primary schools; it might be taken as another limitation in this study.

1.7 Operational Definition of Terms

Conception: Is the view, opinion, perception or understanding of teachers of active-learning methods.

Practice: The exercise of the profession or occupation in implementing the active-learning methods.

Constructivism: is a view of learning based on the belief that knowledge is constructed by learners through an active, mental process of development, and learners are the builders and creators of meaning and knowledge (Rayan and Cooper, 2004).

First cycle primary school: an educational level from grade 1-4

Zone: an intermediate administrative level between region and woreda

Woreda: the smallest administrative unit next to zone consisting of more than one kebele (village level).

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter deals with reviewing various literatures and research findings, which are assumed to have relevance to the study. Thus, it is organized based up on the following major topics: overview of teaching methods, classification of teaching methods, concepts and principles of active learning, Techniques and Indicators of active-learning, strategies for increasing students engagement in active learning, the role of teachers and students in active learning, teachers' active learning practice in Ethiopia, the effectiveness and critiques of active learning and factors affecting active learning.

2.1 Overview of Teaching Methods

Method in general means a particular order imposed upon teaching or presentation of activities. It refers to the construction of how teaching ought to be done (Azeb, 1984).

Methods are means of conveying ideas and skills to impart and acquire a certain subject matter in more concrete and comprehensive way.

Methods describe conceptually the instructional process, that is, not only how information gets from the teacher to the learner but also how the learner; uses it, interact with it, receives guidance, and is given feedback (Martiru et al, 1995).

Methods of teaching refer to the formal structure of the sequence of acts commonly shown by teaching or instruction. It covers both the strategy (a pattern of acts that serves to attain certain outcomes and guard against certain others) and tactics (the arts or mode of teaching or

instruction) of teaching. It involves the choice of what is to be taught at a given time, and the means by which it is to be taught (Azeb, 1984).

In line with this, Clark and Starr (1986) further explained that teaching methods are made up of strategies and techniques. A strategy is really a plan of attack. It outlines the approach you intend to take in order to achieve your objective. Teachers may decide that in a certain lesson you will try to develop a certain concept by using Socratic questioning which is one type of strategy. The means that the teachers use to carry out the strategy. In this case asking specific questions and handling of answers, are variously known as tactics, operations or technique.

Techniques of teaching are the day to day activities which the teacher may design for a particular lesson. They constitute certain aspects of teaching behavior that facilitate learning. Dhand (1990) as cited in Elias (1997) considered teaching techniques as specific steps, and procedure which may affect the learner's encoding process, that is, how the student will learn the desired concepts and skill. Thus, techniques of teaching are developed with the intention of providing practicing teachers with opportunities of selecting, adapting, developing, experimenting and improving specific steps and procedures in the teaching learning process.

Scholars like Clark and Starr (1986) also defined teaching methods as the means by which teachers attempt to bring about the desired learning. Basically, method in teaching concerns the way teachers organize and use techniques of teaching, subject-matter, teaching tools, and teaching materials to meet teaching objectives. It consists of formulating the goals and objectives for teaching, selecting the subject matter and the teaching procedures that will best achieve those objectives, carrying out the procedure, evaluating the success of the learning activities, and following up their success and failure. Because teaching method includes selecting content and instructional materials

as well as teaching procedures, it determines to a large extent what students actually learn.

2.2 Classification of Instructional Methodologies

An individual reviewing written material on the area of instruction could come up with varied classification of instructional methods, such as teacher-centered versus student-centered methods, direct instruction versus indirect instruction, conventional versus non-conventional methods and traditional versus modern method of instruction.

In line with this, ICDR (1999) classified the common teaching learning approach in the same fashion and explained that, though these classifications of methods use different terminology, all of them have similar conceptual frame of reference, i.e. the degree of students' participation in the teaching learning process. In this regard, Borich (1988) have supplemented that the classification of methods are direct (teacher-centered, traditional, formal, expository, didactic, authoritarian etc) or indirect (student-centered, active, democratic, informal, regressive etc) would be made on the basis of: source of the knowledge i.e. who is the center of the knowledge? Role of the teacher i.e. is the teacher a stage settler or information provider? Role of the students i.e. are the students active listeners or active doers? Mechanism of evaluation i.e. the evaluation system subjective or objective?

On the other hand, Azeb (1984) assumes the presence of two broad categories of instructional methods:

- a. Methods that are used to process information (acquisition of knowledge);
- b. Methods that are used to integrate theory and practice (application of knowledge). Out of the classifications of instructional methods, the most popular and dominantly used by

many scholars is the teacher-centered versus the learner-centered instructional methods.

As indicated by many educators the teacher-centered method is the oldest approach, which probably lived for more than thousands of years. This approach according to Plass (1998) makes learners passive receivers of knowledge, while teachers and texts are the source of authority. In this approach lecture format dominates and students learn by rote fashion.

In line with this, Martiru et. al (1995) elaborated that in teacher-centered approach, the teacher mostly telling and the student passively listening or taking notes. This approaches emphasis the transfer of basic information for students to memorize and reproduce. It answers the question 'what' and 'how' only. With the explosion of knowledge in most disciplines, this approach tends to lead to shallow learning and time problems.

Generally, educators like Marcharia and Waria (1994), cited in Yonas (2006) have summarized some characteristics of the teacher-centered approach as follows:

- a. The teacher is more active than the pupils.
- b. The teacher is active in explaining, monitoring and describing.
- c. The pupils listen passively while the teacher "pours knowledge in to them".
- d. The desks are arranged in straight rows.
- e. The main pupil activity is listening and perhaps copying notes from the chalk board.
- f. There is usually no group work.

As a result of using this traditional method of teaching in this modern world, it has been seen a problem endangering to the fruitful results of education.

The shortcoming of teacher-centered method has led to bring about changes for the new learner-centered or active-learning method. The new methods pave the way for the learners' active participation under the guidance of the teacher or in a personal initiative forms. This approach adheres to the strong assumptions of the learner to be active rather than to be passive (Bennet et.al, 1996).

2.3 Concepts of Active-Learning

The concept of active-learning has been credited as early as 1905 to Hayward and in 1956 to Dewey's work (Rogers, 1983a). Rogers describes the shift in power from the expert teacher to the student learner, driven by a need for a change in the traditional environment where in this "so-called educational atmosphere, students become passive, apathetic and bored". In the school system, the concept of child-centered education has been derived from the work of Froebel and the idea that the teacher should not 'interfere with this process of maturation, but act as a guide' (Simon, 1999).

Active-learning is a concept which borrows its meaning from different traditions. Consequently, it could mean different things to different people and different terms are used to represent it, for example, meaningful learning, experiential learning, engaged learning, interactive learning, inquiry learning, participatory learning, progressive learning, cooperative learning, self-regulated learning, learning by doing, student-centered, learner-centered etc. However, advocates of this approach agree that learning is definitely not the mere memorizing of abstract theoretical knowledge, especially if taught by traditional formal methods of instruction (such as lecturing and reading from books) but a change in behavior due to understanding (USAID, 2007).

In line with this, Bonwell and Eison (1991), describe that active-learning is an umbrella term that refers to several models of instruction that focus the responsibility of learning on learners.

The most significant and influential educational advancement in the last thirty years or so is the paradigm shift that increasingly views the learner as the major agent of learning. The student-centered curriculum, learning strategies (Styles), project based learning and others are evidence to this shift. The essence of the shift is perhaps that students should take the primary responsibility for their own learning and teachers should create a conducive atmosphere in which the desired learning could take place. In creating that conducive atmosphere, teachers will definitely interact with their students (Solomon, 2003).

The paradigm shift away from teaching to an emphasis on learning has encouraged power to be moved from the teacher to the students. The teacher focused/transmission of information formats, such as lecturing, have begun to be increasingly criticized and this has paved the way for a wide spread growth of student-centered learning as an alternative approach (Lea et.al, 2003).

One of the proponents of active-learning who broke away from the traditional, teacher-centered and one-way learning was John Dewey. In his popular conception of “learning by doing”, Dewey argued that education must have a practical value for and be useful to the learner. According to him teaching should be carried out on real life experiences and it should be followed by reflection. Learning from his perspectives has to be participatory, democratic and the learner has to play an active role by reflecting on learning experience (USAID, 2007).

In line with this, Dirribsa (2005) also describes “learning by doing” is a theme that many educators have stressed that children must be engaged

in an active quest for learning new ideas. Students should be presented with real life problems and then helped to discover information required to solve them.

On the other hand, there is an old saying that all teachers know well. "You can lead a horse to water, but you can't make it drink". Similarly, you can have a child in a classroom, but you can't make him or her learn. Pouring information in to students or forcing them to do work books or problem sheets won't always do it. Nor will the great majority of students learn if simply allowed to wander through a library or laboratory on their own. Some thing must happen in learners before they learn Curiosity? A problem that they want or need to solves? And then, with the direct or indirect help of the teacher, the student "constructs" knowledge from the information available to him or her (Rayan and Cooper, 2004).

Constructivism is a theory of knowledge acquisition built on the idea that the learner interacts with new information to "construct" meaning from it. Constructivism provides a frame of reference for organizing classroom practices so that students learn in all content areas. Contrary to educational practices in which learners passively receive information, the constructivist approach requires that learners actively interact with the information, building on their prior knowledge, attitudes and values. As learner encounter new information or experiences, they ask themselves, "What makes sense here? What happens when I do this or change that?" In this active-learning process, learners build and add to their understanding of concepts, rules and strategies through direct, hands-on experimentation as explained by Rayan and Cooper (2004).

In addition to this, scholars like Silberman (1996), further elaborates that active-learning is an approach that gives a due emphasis to the learner to be an actor in learning and searching solutions rather than to

be dependent only on the teacher. Active-learning refers to the level of engagement by the student in the instructional process. An active-learning environment requires students and teachers to commit to a dynamic partnership in which both share a vision of responsibility for instruction. In such an environment, students learn content, develop conceptual knowledge, and acquire skills through a discovery oriented approach to learning in which the learner is not only engaged in the activity but also with the goal of the activity. Essential to this approach is the view of the learner as responsible for discovering, constructing and creating new and the view of the teacher as a resource and facilitator.

This implies that in active-learning method, the learner develop their own understanding of the topics they study instead of having it delivered to them by others (most commonly teachers) in an already organized form.

Therefore, constructivism places the learner in the center of the learning process.

“Current research (on learning) ... focuses on the role of the student. It recognizes that students do not merely passively receive or copy input from teachers, but instead actively mediate it by trying to make sense of it and to relate it to what they already know (or think they know) about the topic. Thus, students develop new knowledge through the process of active construction” (Eggen and Kauchak, 2001).

Silberman’s (1996) conception of active-learning in to 101 strategies to teach any subject shows five main structures of active learning. These include: arranging the physical environment; getting students to be active from the start; helping students to acquire knowledge, skills and attitudes actively; and making learning unforgettable. For Silberman (1996) as cited in USAID (2007) active learning constitutes the collection of instructional strategies that makes students do most of the work. He says that students use their brains, studying ideas, solving problems, apply what they learn. The process is fast paced, fun, supportive, and

personally engaging. Active-learning gives the brain the means to receive information, link it with past experience, test, explain and retain information. It enables to meet different learning styles (visual, auditory, kinesthetic) and the social nature of learning (the need to feel safe with other people, challenging a problem in groups).

Lea et.al (2003) summarizes some of the literature on student-centered learning to include the following tenets:

1. the reliance on active rather than passive learning;
2. an emphasis on deep learning and understanding;
3. increased responsibility and accountability on the part of the student;
4. an increased sense of autonomy in the learner;
5. an interdependence between teacher and learner;
6. mutual respect within the learner teacher relationship; and
7. a reflexive approach to the teaching and learning process on the part of both teacher and learner.

In order to decide whether a given activity is learner-centered or not, as Temechegn (2002) suggests that it depends largely on who is in charge; who decides what should be learned; who should learn it; what methods and resources should be used and how the success of the effort should be measured.

In short, active-learning is anything that students do in a classroom other than merely passively listening to an instructor's lecture. This includes every thing from listening practices which help the students to absorb what they hear, to short writing exercises in which students react to lecture material, to complex group exercises in which students apply course material to "real life" situations and /or to new problems.

The implication of this is that, in active-learning methods students' involvement and active participation is very vital with their own responsibility. And the teacher should consider himself as a facilitator, coach, guide rather than being as a source of knowledge.

2.4 Principles of Active-Learning Instruction

Principles are those guidelines or procedures used to be followed during the process of implementing certain activities. In line with this, there are some specific principles mentioned by different authors at different time to be used as a guideline during the practice of active-learning instruction.

To Hein (1991), as cited in Matewos (2008) some of the major principles are presented as flows: The first principle is that learning in an active process is which the learner uses sensory inputs and constructs meaning out of it. He also describes meaning making as a process that takes place in the mind. He argues that along with hands on activities, mind on activities are also equally important. We need to provide activities, which engage the mind as well as the hands.

The other principle stated by Hein (1991), as cited in Matewos (2008) is that learning is a social activity. Our learning is intimately associated with our connection with other human beings, our peers, teachers and our family. It is not possible to isolate learners from social interactions and expect learning to occur.

In line with this, Brandes and Ginnis (1986) also present the main principles of student-centered learning as:

- the learner has full responsibility for her/his learning;
- involvement and participation are necessary for learning;

- the relationship between learners is more equal, promoting growth, development;
- the teacher becomes a facilitator and resource person;
- the learner experience in his education (affective and cognitive domains flow together); and
- the learner sees himself differently as a result of the learning experience.

In addition to these, supporters of active-learning method also argue that learning takes time. It is not occurring immediately. In order for significant learning to occur, we need to revisit ideas and time is required to reflect his/her idea. In this regard, Eggen and Kauchak (2001) argue that giving student time to think about their answer increases the quality of student responses significantly.

Therefore, we can understand that during the practice of active-learning method, teachers should have to follow the above mentioned guiding principles for effective implementation.

2.5 Techniques of Active-Learning Approaches

The modern thinking and practice in education highly advocates the needs of involving learners in the process of learning. This is because active involvement of the learner helps us to create active and problem solver citizen. In doing so, it is necessary to use different techniques of active learning method. Some of these techniques are mentioned below.

A. Role Playing- is a method of acting out an imaginary but real-life situation. Role playing exercise can range from simple to complex. This strategy can be extremely effective, but it is important to be sensitive to the fact that some students are very un-comfortable acting out. One alternative is to have students write about their assigned role rather than act the role (Yonas, 2006).

B. Project Method- This method is one of the most valued modern methods of teaching and learning actively. As indicated by Abraham, et.al., (1999) a project is a natural, life like learning activity involving the investigation and solving of problems by individuals or groups of learners. Since it is based on a real life and results in problem solving, the students are engaged in it by fully being interested.

It play an important role in primary schools if attention in given to it. As indicated by Beswick (1987) cited in Desta (2001) in primary schools, it has been estimated that children spend up to perhaps 15 percent of their time on project work; frequently interdisciplinary in nature and intention. In secondary schools, projects of this kind may take place in earlier years or in general studies. Finally, the project method of teaching should consist of a real learning activity and should be pertinent to the subject taught.

C. Discovery Method- The principal common factor in discovery teaching methods is that the pupils are expected to draw conclusions and generalization from some form of induction, observation or application of principles. The premises behind discovery method is that, one learns to think by thinking and that knowledge figures out for oneself is more meaningful, permanent, and transferable than concepts that teachers attempt to give to pupils ready made (Clark and Callahan, 1998).

This implies that learning is more meaningful and therefore more useable when pupils seek out and discover knowledge by themselves rather than being receivers of knowledge.

For discovery learning to take place there are steps to be considered:

- ❖ Select the generalization.
- ❖ Set a situation to solve problems.

- ❖ Set up experience that will bring out the essential elements such as problem solving questions, demonstration and so on.
- ❖ Set up experience that will bring out contrasting elements.
- ❖ Draw generalization or concepts (Clark and Callahan, 1998).

D. Discussion Method- Discussion is the flow of words, which takes place among the member of the group and its leader, as they attempt to define their problem or to discover answer to them. Thus the purpose of discussion is to examine information in order to develop a deep and broader understanding of the topic. The role of the leader (teacher) is to prepare, execute and follow up. The success of the discussion depends on the teachers' skillful use of questions and careful staging of the classroom condition to promote free flow of ideas and thinking.

For discussion to be successful the participant need sufficient background to know what they are talking about and to base their argument on fact. Moreover open communities and supportive atmosphere are essential for good discussion. Discussion in the class is an important kind of learner-centered activity (ICDR, 1999).

The major significance of discussion is that it gives chance for students to practice thinking to look at their own ideas, to formulate ideas and principles, and to face up to immediate feed back from their peers.

E. Concept Mapping- A concept map is a way of illustrating the connections that exist between terms or concept covered in course material; students construct concept maps by connecting individual terms by lines which indicate the relationship between each set of connected terms. Most of the terms in a concept map have multiple connections. Developing a concept map requires the students to identify and organize information and to establish meaningful

relationships between the pieces of information (Paulson and Faust, 2003).

F. Cross Over Group- A form of group activity in which the class is divided into groups which have a discussion. After some time, one or more members of which group mover and join one of the other groups. So two students from group A might join group B, two from group B might join group C and so on, and the discussion continues. In this way ideas from the different groups are shared without the need for a feedback session.

G. Active Review Sessions- In the traditional class review session the students ask questions and the instructor answers them. Students spend their time copying down answers rather than thinking about the material. In active review session the instructor poses questions and the students work on them in groups. Then students are asked to show their solutions to the whole group and discuss any differences among solutions proposed (Paulson and Faust, 2003).

H. Waits Time- Rather than choosing the student who will answer the question presented, this variation has the instructor WAITING before calling on some one to answer it. The wait time will generally be short (15 seconds or so) - but it may seem interminable in the classroom. It is important to insist that no one raise his hand (or shout out the answer) before you give the OK, in order to discourage the typical scenario in which the five students in the front row all immediately volunteer to answer the question, and every one else sighs in relief. Waiting forces every student to think about the question, rather than passively relying on those students who are fastest out of the gate to answer every question. When the wait time is up, the instructor asks for volunteers or randomly picks a student to answer the question. Once students are in the habit of waiting after questions are asked, more will get involved in the process (Paulson and Faust, 2003).

- I. Jigsaw Group-** In jigsaw group, each member of a group is asked to complete some discrete part of an assignment, when every member has completed his assigned task, the pieces can be joined together to form a finished project.

As a whole, the above mentioned various active-learning techniques are some of the prominent activities which the teacher incorporates in to the real classroom situation in order to increase the participation of students and to foster active-learning method of teaching.

2.6 Indicators of Active-Learning

Jones et.al (1994) developed eight indicators of active-learning which they believed can act as “compass” for reforming instruction. These are:

- 1. Success in active-learning-** successful active-learning from their perspective involves students’ self-regulated ability to define their own learning and evaluate their own achievement. It also includes students’ joy in learning and their collaborative efforts.
- 2. Tasks in active-learning-** It is said that tasks need to be challenging (to be done in collaboration with peers, mentor, family), authentic (relevant to home and work place) and multidisciplinary (involves problem solving and projects).
- 3. Assessment of active-learning-** This assessment involve presenting students with authentic tasks, project or investigation and then observing, interviewing and examining their presentations and artifacts to assess what they actually know and can do. This assessment is called performance-based and it is generative for students are involved in generating their own performance criteria.
- 4. Instructional models and Strategies-** In this part the most powerful models of active-learning are described as interactive to show the active role of the learner and the generative and constructivist character of the process. Some strategies for active-

learning are given as individual and group summarizing, means of exploring multiple perspectives, techniques for building upon prior knowledge, brainstorming, Socratic dialogue, problem solving process, and team teaching.

- 5. *The learning context of active-learning-*** It has been argued that for active-learning to take place the class room must be conceived of as knowledge- building learning community. This context is chiefly characterized as collaborative, allowing value diversity and multiple perspectives.
- 6. *Grouping for active-learning-*** It is mentioned that collaborative active-learning requires forming small groups or teams of two or more students within a classroom. Heterogeneous (different sexes, cultures, abilities, ages, socio-economic background) and flexible grouping (in relation to specific instructional purposes) are equitable means to increased learning opportunities.
- 7. *Teacher roles-*** It has been indicated that the role of the teacher in the classroom shifted from the primary role of information giver to that of a facilitator, guide and learner. As facilitator, the teacher provides rich environments and learning experiences needed for collaborative study. The teacher is also required as a guide, a role that incorporates meditation, modeling and coaching. Often a teacher is also a co-learner and co-investigator with students
- 8. *Student roles in active-learning-*** It has been noted that students are explorers. This includes student interaction with other people and the physical world, their reflection upon their discoveries, their apprenticeship and the fact they become teachers and producers of knowledge.

This generally implies that if these various indicators of active-learning are practiced or observed in the classroom during the process of teaching and learning, then one can simply conclude that the instructional method employed is active-learning.

2.7 Strategies for Increasing Students' Engagement in Active-Learning

Students' engagement has been conceptualized as a process that involves the attention, effort, and mental investment students expend in the work of learning (Marks, 2000). This conception appears to be consistent with other definitions of engagement such as students' active involvement with the learning process; their psychological investment in and effort directed towards learning or mastering the knowledge, skills and attitudes that academic work is intended to promote (Wendemagegnehu, 2006).

According to Fauzia et.al (2007), the following are the major strategies for increasing student involvement:

1. Involving students in decision-making
2. Enlarging the action zone
3. Improving question-answer technique
4. Using pair and group work effectively.

2.7.1 Involving Students in Decision-making

Traditionally it is the teacher who dominates decision-making about teaching and assessment. This monopoly of the teacher arises from the behaviorist view that learning happens due to the teachers teaching behavior. However, if learning is to be effective, students must understand what is happening in the classroom, why it is happening and how that leads to their learning.

The following strategies may increase student involvement by giving a greater role in decision-making (Fauzia et.al, 2007).

- b. Ensure all students understand the purpose of the class and the learning objective they are aiming to achieve. Learning objectives should be available for reference at all times so it is best to write

them on a selection of the board that you will not need to erase during the class. Alternatively teachers could ask student to write them in their note books at the start of class.

- c. Use learning contracts: These are forms on which students state their specific learning objectives. The resource may need and the actions they will take to achieve their objectives.
- d. Share assessment criteria with students or, even better; involve students in setting the assessment criteria.

2.7.2 Enlarging the Action Zone

According to Fauzia et.al (2007), the following strategies may help to increase student involvement by enlarging the action zone. These are:

- a. Change your teaching style to focus less on lecturing and more on students doing activities in pairs or in small groups. As a result you widen the activity zone to include the whole classroom. Use variety of activities that will interest and involve all the students.
- b. Get students to change their seats. For example, every Monday, have the front row move to the back and all other rows move forwards so that during the term all students have the chance to sit in the action zone.
- c. If there is a space, move around the class and conduct whole class activity from different place (front, back, middle of the class). If it is difficult for you to move around the class, move up each row learners.

2.7.3 Improving Question- Answer Technique

Moreover, students' engagement in active-learning is found to be enhanced in classrooms where teachers pose open-ended questions, incorporate student responses into further questions, and build discussion around the ideas the exchange generated (Nystrand and Gamoran, 1991) as cited in Wendemagegnehu (2006). Even though open-

ended questions are believed to be more capable in generating active learning classroom events than close-ended questions, the vast majority of class questions asked by teachers are found to be close-ended Dillon (1988), as cited in Wendemagegnehu (2006).

As to Fauzia et.al (2007), the following strategies can increase student involvement in question-answer sessions:

- b. Begin with some straight forward questions (such as reiteration of facts from the text) that all students should be able to answer. Follow with more complex questions (that require inferring, evaluating or summarizing) but all require more thinking time and perhaps time for students to exchange ideas with a partner.
- c. Be sure every one has heard and understood your questions you may want to reinforce the question posed orally by writing it on the board.
- d. When you ask a question that requires thinking, give time for all students to work out the answer. Ask that students raise their hands when they have the answer and wait until many students raise their hands before choosing some one to respond. For more complex questions encourage students to write down the answer before they raise their hands.
- e. Encourage students to back up their responses with evidence for example if they give a yes/no or true/false answer asks them, "What makes you say that?"

2.7.4 Using Pair and Group Work Effectively

The finding of the studies have revealed that students active engagement in learning occurred when teachers design and employ learners' grouping that is appropriate to the objectives of the lesson and the nature of the activities (Nunan, 1992).

In a similar fashion, Fauzia et.al (2007) identified the following strategy that encourages students involvement by using pair and group work effectively:

- a. Use groups of no more than 6 students, in large groups some students will tend to be passive and the group may become difficult to manage.
- b. Set tasks that require group members to interact and work collaboratively together-task that creates interdependence amongst group members. The following categories are suggested by Nation (1994), as cited in Fauzia et.al (2007).
 - Combining**: Each member has unique essential information to complete the task (e.g. Completing a story by bringing parts together, or giving some one instruction to complete or draw something].
 - Cooperating**: All members have equal access to the information required and the purpose is to enable the learners to share (e.g. logical puzzles, simulations, role-play etc).
 - Superior-inferior structure**: one or more group members have information the other need (e.g. data gathering, interviews etc.)
 - Individual structure**: Each member has the same information and should perform individually (e.g. chain story, where by one starts a sentence and each student is asked to add the next sentence).
- c. Set a variety of tasks to cater for the different learning preferences of your students-those who like to learn by moving, others who perform to write and draw.
- d. Give very clear instructions, ideally both in verbal and written form.
- e. To ensure the smooth running of the group assign/or have the group assign/ roles to different group members leader, note taker, spokesperson etc.

In addition to these, as the researcher reviewed different literatures on the same issue, he found out that connecting class topics with students' lives, offering students' choices in their learning, as well as using writing and various technologies can make students more active and engaged participants in their own education.

The implication of these is that without the active-involvement of learners in the learning process, there is no active-learning. Thus, in order to create active-learning classroom, teachers should use the above mentioned and other strategies so as to increase the degree of students' engagement actively in the process of teaching and learning.

2.8 The Role of Teachers in Implementing Active-Learning

A learner-centered approach requires a shift in roles and responsibility, a different set of rights and obligations on the part of a teacher and students.

In the learner-centered classroom, the learners are expected to contribute, to draw up on their own knowledge, beliefs and experience. It is part of the teacher's responsibility to exploit that bank of knowledge, to raise student awareness of the contribution they can make, to motivate them by drawing on topics and areas that are relevant and of interest (Plass, 1998). According to Aggrawal (1995) if the learners are motivated, they respond to opportunities to be active and creative.

The role of the teacher in the classroom has shifted from the primarily role of information giver to that of facilitator, guide and learner. As a facilitator the teacher provides the rich environments and learning experiences needed for collaborative study. The teacher also is required to act as a guide, a role that incorporates mediation, modeling and

coaching. Often the teacher is also a co-learner and co-investigator with the students (Jones et.al, 1994).

Similarly, Dirribssa (2005) expressed the role of teacher in student-centered classroom as a guide and mentor helping students access, interpret, organize and transfer knowledge to solve authentic problems, while students gain expertise not only in the content areas being studied, but also in learning. In fact teachers become more than guide in the side of helping to find answers to real life problems.

In the learner-centered classroom, the teacher is expected to act as a resource for input, but not the only source. Input will also be provided by the students, by the material, by the task itself. In many cases, input can be dealt with, outside of class by using the library, studying documents, course books, text books and other data. Understanding can be checked by asking students to provide a resume or summary for use in class (Plass, 1998).

On the other hand, Amare (2000) describes-the role of the teacher in the learner-centered method will be changed to managerial than authoritarian. He wrote that the appropriate role of teachers in learner centered is accepted to be managerial rather than pedagogical. That is, teachers are expected to facilitate student learning and do so by encouraging student activities and student performance and by discouraging teacher's performance in the class room.

Regarding the role of the teachers as manager in learner-centered method, Plass (1998) also emphasized that there are many options open to the teacher in learner- centered classroom in which the teacher takes on the role of manager, and of a facilitator of learning. The teacher can act as a monitor, to ensure that students are proceeding in the correct way and in the right direction, helping students to prioritize and organize

their learning, or perhaps participate as group member if the students are losing track of their objectives.

One of the many exciting features of student-centered learning is the empowerment of a teacher to become an active designer of curriculum and a facilitator of learning. As a curriculum designer, the typical teacher's role changes from implementing externally made curriculum to being an active decision maker in the curriculum planning process. The teacher's role changes from that of a disseminator of information to a facilitator of learning (Levine, 2001).

The facilitator skills of the teacher are central to the success of problem based learning. The teacher serves as a coach or guide for student learning. As a facilitator, the teacher challenges, questions, and stimulates the students in their thinking, problem solving and self-directed study. After a while, the student will similarly challenge each other and them selves as they work, think and teach (Levine, 2001).

In addition, the teacher can suggest sources for consultation, encourage and support the learning process, guide and direct as required and highly important, provide critical feedback, both positive and negative. The teacher can also provide opportunities for students to evaluate their own and their peers' performance, to reflect on the subject matter and on the learning process itself, there by promoting the acquisition of effective study skills (Plass, 1998).

In general, according to Aggrawal (1996) the role of teacher in child-centered education may be sum up as follows:

- Motivating children.
- Developing trust and confidence in children's capacity to learn.
- Becoming as a resource for creating meaningful learning experiences.
- Accepting the individual and the group.

- Participating as a member of the group in guiding learning.
- Becoming sensitive to the child's needs and interacting in a way that would provide a sense of feeling and security.
- Recognizing and reinforcing the individual contribution.

Therefore, in the learner-centered methods of teaching, even though, the students are responsible for their own learning; it doesn't mean that the teacher is less important. Rather he/she has a great role in the process of learning.

2.9 The Role of Students in Active-Learning Method

As indicated in ICDR (1999), in the new approach to modern education often called active-learning, students not only receive information from lectures and books, they also collect information, record it systematically, discuss it, compare it, analyze it, draw conclusions from it and communicate about it.

This implies that, in the learning process, students are not expected simply to be passive and absorb what they have given but they should be active in organizing ideas and be able to be creative.

The other educator, Dirribsa (2005) states that it is true that students must do more than just listening to teacher and note taking. They must read, write, discuss or to be engaged in solving problems. Most importantly to be actively involved, students must engage in such higher order thinking tasks as analysis, synthesis and evaluation.

The student's knowledge and experience, what students bring with them, are a valuable resource. The student is not an empty vessel waiting to be filled with knowledge. According to Plass (2000), students bring with them their own set of beliefs and values, their culture, ethnic and social backgrounds and their own world knowledge. They bring their learning

styles and strategies, their personal interests, their likes and dislikes, their knowledge of and attitudes towards institutions, towards teachers, towards their chosen area of study. They bring with them their desire for knowledge, their willingness to communicate, their hopes and expectations as well as their anxieties and their prejudices. All these things may influence learning outcomes and equally all of them can be looked upon as a resource in the classroom.

Students assumed new roles in student-centered classroom. Their major roles are collaborator and active participator. It is useful to think how these new roles influence the process and activities students conduct before and after learning. For example, before learning students set goals and plan learning tasks, during learning they work together to acceptable task and monitor their progress and after teaching they assess their performance and plan for future learning.

Moreover, student enjoys and becomes active, even eager participants in the learning process in the student-centered approach and it is a good beginning to life learning. Learner-centered class involves a highly participatory approach in which students are actively involved in making decisions about all aspects of the course including Content, presentations and evaluations (Campbell, 2002).

Therefore, in the learner-centered classroom, since students are expected to construct their own knowledge, they do have a number of different roles and responsibilities as mentioned above.

2.10 Teachers' Active-Learning Practice in Ethiopia

In what is now regarded as a “paradigm shift”, an overall change is going on in Ethiopian teacher education. One of the main issues at the center of this shift is the replacement of “rote, passive learning by active and learner focused education” (TESO, 2003). This requires a teacher

education system that develops higher order thinking and skills of graduates. It also needs upgrading the already available educational professionals to meet the new requirements. USAID has been a partner in Ethiopia's efforts to develop its teacher education system in line with the changing needs of the country's overall education in the 21st century.

A study made by USAID /2007/, on active-learning practice from 2003/04-2006/07 indicated that the average percentage of learning time using active-learning methods have increased tremendously, but not all or even the majority of expected active learning practices were demonstrated in each subject over the years. In fact, at the beginning of the USAID intervention there were almost no active-learning practices in both Teacher Education Institutes and Cluster Schools. Activities of such nature were "asking questions and giving responses", such practice also exists in traditional instructional and it is hardly new. Over the years, however, it was possible to see active-learning practice in both Teacher Education Institutions and cluster schools. It is interesting to see that teachers very strongly use active-learning methods during presentation of lesson subject matters. However, the use of active-learning methods in lesson introduction, stabilization and assessment is lower than presentation of lesson subject matters. This finding is the same for Teacher Education Institutions and Cluster schools. The use of active-learning also varied among subjects. Science (Chemistry, Biology and Physics) and Environmental Science (grade 1-4) subject teachers used active-learning methods in most of their presentation. One possible explanation lies in the nature of the subject; the Teacher Education Institution and primary schools curricula were revised between 2001 and 2003 to focus more on practical skills than theory.

Even though, this study shows a considerable progress of active-learning practice in USAID/ Basic Education program supported primary cluster

schools and Teacher Training Institutions; however the level of active-learning practices has a long way to go to meet satisfactory level of use.

2.11 The Effectiveness and Critiques of Student-Centered Learning

The use of student-centered learning appears to be reflective of today's society where choice and democracy are important concepts. However, is it an effective approach to learning? Lea et.al (2003) reviewed several studies on student-centered learning and found out that it was an effective approach. Because it developed better study skills and understanding; it increased students' participation, motivation; there was more respect for the student in this approach that it was more interesting, exiting, and it boosted their confidence.

Student-centered learning, despite its popularity, is not without its critics. The main critique of student-centered learning is its focus on the individual learner. In addition, there are some difficulties in its implementation, i.e. the resources needed to implement it, the belief system of the students and staff, and students' lack of familiarity with the term (O'Neill and McMahon, 2005).

Simon (1999) describes that student-centered learning, in the school system, can be in danger of focusing completely on the individual learner and taken to its extreme does not take in to account the needs of the whole class. Simon further highlights the point that "if each child is unique and requires a specific pedagogical approach appropriate to him or her and to no other, the construction of an all embracing pedagogy or general principles of teaching becomes impossibility. Edwards (2001) also highlights the dangers associated with student-centeredness in adult education where in empowering an individual there is a potential danger of "a person's physical isolation from other learners." The importance of

the social context of learning and the value of interaction with peers is emphasized in the socio-cultural view of learning. The concept of being an independent learner choosing his/her own route of learning, may in fact drive some of the sociability out of the learning process if care is not taken to emphasize the importance of peers. In relation to this individuality, Lea et.al (2003) study result on psychology students highlight their concern over being abandoned or isolated from other supports in a student-centered learning approach.

According to O'sullivan (2003), cited in O'Neill and McMahon (2005) described that student-centered learning as a western approach to learning and may not necessarily transfer to the developing countries, such as Namibia, where there are limited resources and different learning cultures. It can be equally hard at times to see how the approach can be economical in the large classes.

Another concern regarding student-centered learning is the belief that students hold in relation to their learning. Students who value or have experienced more teacher-focused approaches, may reject the student-centered approach as frightening. On the other hand, lecturers with a teacher-centered approach to teaching held views that students should accommodate information rather than developing and changing their conceptions and understanding. The reverse was true for those with more student-centered approaches to their teaching (O'Neill and McMahon, 2005).

2.12 Factors Affecting the Implementation of Active-Learning

In order to facilitate or hinder the implementation of active-learning methods of teaching, there are a number of factors which can be mentioned as human-related factors and non-human factors. But the researcher has reviewed only some of them.

2.12.1 Human-Related Factors

A. Teachers' Attitudes:

The attitude of teachers has a greater influence on the effective implementation of student-centered instructional approach.

Many educators have confirmed that the attitude of teachers towards active-learning is a determinant variable in their effective implementation. In this regard, Plass (1998) explains that the teachers' attitude towards active-learning largely depends on the epistemology they adhere. This is to mean that teachers who strongly support positivist epistemology assume that knowledge exists separate from the learner. The assumption is that the teacher is the source of knowledge and knows best. In deed, learners are assumed to be "empty vessels" to be filled by the teacher. Thus, those teachers who are in favor of positivist epistemology could have negative attitude towards active-learning. On the other hand, there are also teachers who view knowledge as it is produced through interaction between the learner and the world around her/him called constructivist epistemology. This interaction leads to interpretation and understanding, not just memorization. Hence, teacher who adhere constructive epistemology have positive attitude towards active-learning.

B. Teachers' training:

The training of teachers can affect the success of educational process in general and the implementation of active-learning method in particular.

Therefore, teachers should be properly trained. According to Tilahun (2002), untrained teachers in most cases are found to be inactive. This is particularly observed in the earlier days, with primary schools' teachers directly employed and not given in-service training or is not exposed to workshops and seminars. Such teachers even if they are provided with best kind of materials and excellent curriculum they may remain ineffective and unlikely are successful.

A teacher training is one of the means if not the only to create and develop teaching competencies. International experiences suggest that learning complex skills, such as those required to promote active-learning requires proper initial training followed by periodic reinforcement to sustain changes in teaching behavior (World Bank, 1997) as cited in Yonas (2006).

However, educators have noted that there is a problem in teacher training programs because they failed to relate theory with practice. In this regard, Amare (2000) has explained that one could speculate a possible student exposure to the new perspectives in a teacher-training program. The discrepancy could, however, be explained partly by the conflict between what prospective teachers are told to do and what their instructors actually do. This is in short, anomaly between theory and practice exists.

In line with the above idea, ICDR (1999) supplemented that "teachers teach the way they were taught". If teacher trainees learn mainly through the lecture method, this will be their main mode of instruction. If teacher trainees experience participatory methods they will tend to use them in their own teaching.

Therefore, there should be a proper orientation for the trainees to make them knowledgeable, skillful, concerned and professionals and as a result it enables them to teach the child effectively.

2.12.2 Non-Human Factors

Non-human factors, like that of human factors can either facilitate or inhibit the effective implementation of active learning.

A. Class size

If the number of students in a class is very large, it is difficult to provide different experiments and group works. At the same time a single teacher can't facilitate and manage all these activities.

In line with this, Smith (1996) has mentioned the following disadvantages that come as a result of large class:

1. Individualization of instruction is limited
2. Instruction to be lecture without group participation.
3. Oral communication within the classroom from pupil to pupil to teachers is minimized.
4. Written work is assigned less frequently and when assigned receives less teacher attention.
5. Pupils are less well known to teachers as individuals.

Therefore, for proper implementation of active-learning the number of student in a class should be reduced.

B. The physical environment

The physical environment (class room layout and appearance, classroom arrangement, furniture arrangement etc) contribute a lot to promote active-learning method. According to Silberman (1996), the physical environment in a classroom can make or break active-learning. The interior of classrooms can challenge active-learning especially when the furniture is less than ideal. According to Henveld and Craig (1996) there should be adequate well maintained and furnished classrooms to effectively conduct teaching-learning process. Classrooms are adequate

when there is desk for every pupil and when it is well ventilated with good light and there is a standardized chalk board for every class.

In this regard, Temechegn (2001) indicated that the physical layout of classrooms in Ethiopian schools is mentioned as factor that is not conducive to learner-centered applications. It is generally true that attention to the classroom learning environment in learner-centered method may include changing the physical layout of the room allowing for seating changes. If the furniture is moveable, it is possible to arrange different layouts or sitting arrangements that can facilitate learner-centered method of teaching.

C. Instructional Materials

The availability and usage of instructional materials have a great role in the process of teaching and learning.

According to Amare (1999), instructional materials include materials with which students and teachers interact for the purpose of learning-teaching. They are instruments with which a teacher teaches and from which students learn. He further emphasized that teaching without instructional materials boils down to teaching without technology.

In addition to this, Aggrawal (1997) suggested that effectiveness in learning lies not in reading and listening, but in action; performance and experience using different instructional materials.

As a result, for the application of active-learning method of teaching effectively, different instructional materials must be available and used.

D. Organization of Curriculum Materials

When we say organization of curriculum materials, we mean the preparation of text books, teachers' guide, syllabus and other similar materials which are highly used by both the teachers and students. So that it has a great impact during the practice of active-learning method.

In our case what we see practically is that, most of the curriculum materials prepared is full of information that is over crowded or containing too much contents with very few practical activities and exercises. In relation to this idea, Lue (2000) elaborated the problems of teachers by saying that "Teachers will often skip over these activities and go on to the next unit because they are pressed to 'get through' the book to 'cover' or present all the information contained in the book."

This greatly reduces the creativity of the learners by their own and in turn hinders the practice of active-learning. Thus, the materials need to be developed in the context of learning theories and teaching styles so that they could start the teacher in the right path. They need to be designed in such away that they guide and direct the teachers to apply active-learning methodologies on a daily bases.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Method of the Study

This study explored teachers' conception of active-learning, current practices and the major problems faced in its implementation at the first cycle primary schools of Awi Administrative zone. To attain this, a descriptive survey method was employed. This is because, it helps to explain educational phenomena in terms of the conditions or relationships that exist, opinions that are held by the teachers, processes that are going on, trends that are developing [kalu, 1996]. In addition to this, the qualitative approach was used to get an in-depth understanding of complex process which is related to human behavior that affects the conception and practice of active-learning method.

3.2 The Sources of Data

The main sources of data for this study were teachers and principals in selected government first cycle primary schools of Awi Administrative zone.

3.3 Sample Population and Sampling Techniques

Awi Administrative zone is one of the zones in Amhara regional state which has 10 woredas. The total numbers of teachers [populations] in all the first cycle primary schools were found 603 in the zone. Thus, the valuable information for this study was collected from three randomly selected woredas. Though there is no a blue print rule to fix the sample size, the researcher, after considering the time allotted for data collection, the budget allocated for the study and the nature of the population in the study area, belived that one-third of the woredas could represent the others. Accordingly, three woerdas, which accounted 30%

were selected. The sample woredas, schools and source of data are summarized in Table 1.

Table 1. Sample woredas, Schools and Source of Data included in the Study

No	Woreda	Total no of 1 st cycle primary schools.	No of sample schools	Total no of teachers			No of teachers participated	No of principals participated
				M	F	T		
1	Injebara	5	1. Bahunk	6	9	15	15	1
2	Banja	26	1. Bida	2	6	8	7	1
			2. Lideta	5	7	12	10	1
			3. Chewsa	1	6	7	6	1
			4. Kessa	-	16	16	14	1
3	Guagusa Shikudad	24	1. Jibayita	3	6	9	8	1
			2. Hibert	2	11	3	13	1
			3. Askuna	4	6	10	10	1
			4. Abisela	4	9	13	13	1
	Total	55	9	27	76	103	92	9

As it is shown in table 1, with in these three woredas there were 55 first cycle primary schools. Similarly, among these schools, nine[16.3%] first cycle primary schools were randomly selected (lottery method). Regarding teachers, the sample population of 103 teachers assigned to teach in the selected nine first cycle primary schools for the academic year 2008/9. For this study a total of 92 teachers were taken using availability sampling method. Availability sampling enables the researcher to select subjects on the basis of availability. It is often appropriate to get some sense of prevailing attitudes [Chambuss and Schutt, 2007]. While editing of the questionnaires, two of them were not completely filled. Due to this, two questionnaires were discarded and only the responses of 90 teachers were used. Regarding the number of respondents for descriptive research, it is common to sample 10 to 20% of the population [Gay and

Airasia, 2000]. Furthermore, the researcher also considered other factors like the target population size and the instruments developed for data collection. By taking this as a base line, 15% of the target population was selected as respondents.

In addition to these teachers, 9 principals from the sample schools were included to be interviewed using purposive sampling method. Purposive sampling is used when a researcher wants to select a sample population on his/her own judgement, based on his/her prior information, that he/she believed to provide him/her the data he/she needs [Fraenkel and Wallen, 2000].

3.4 Instruments of Data Collection

The data for the study were collected using four data collecting instruments, namely questionnaires, observation, focus group discussion and interview.

3.4.1 Questionnaire

Questionnaire is widely used in educational research to obtain information about certain conditions and practices and to inquire in to opinions and attitudes of individuals or group [Kaul, 1996]. Therefore, it was developed to obtain information from teachers about their conception of active-learning and how they are practicing it. The first 16 close-ended items were prepared in a five-point likert scale to explore teachers' understanding of active-learning method. The second 4 open-ended items were developed to investigate mainly the practices and those problems which affect implementation of active-learning and possible solutions. The items of the questionnaire were both close-ended and open-ended type. Some of the items in the structured questions were positively worded and others were negatively worded in order to counter possible bias.

3.4.2 Observation

According to Best and Kahn [2003] observation can be employed to collect data regarding the number of occurrences in a specific period of time, or the duration of very specific behavior or events. It is a mechanism in which the researcher observes what is happening in the real classroom situation. The main advantage of this method is to reduce biases of reported responses and to see/identify practices that could not be responded through questionnaire. The class room observation is made by the researcher himself.

It is the world of “classroom” where all the hidden and manifest interaction and efforts of education occur (Solomon, 2004). Based on this, we can say that the major and central source of data is class room because it describes what was happening in the class during instruction.

During the classroom interaction, the real instructional activities are manifested while teachers teach and students learn. As a result of this, for this study it is possible to assess teacher practice of active-learning in the real classroom situation. Therefore, structured observation [observation using prepared check-list] was conducted to undertake descriptive studies.

The observer during observation recorded the presence and absence of activities listed in the check-list. In doing so, check-list was prepared for classroom observation. It contained three major sections, namely: Teacher activities, Activities of student and school facilities including instructional materials.

From nine selected sample schools, classroom observations were made on seven schools at grade three and four .On averages three observations were made in one school. The observations were made by the researcher

according to the check-list prepared. The activities in the checklist were carefully observed and filled in the check-list from the beginning of the period up to the end of it. The observations totally focused on how the teacher currently practices active-learning method in the real classroom situation. This also indirectly helped the researcher to know teachers' conception of the method that they have used.

3.4.3 Focus Group Discussion (FGD)

The FGD was held in all the sample schools. The purpose was to supplement and enrich the information that was drawn by the questionnaire, observation check-list and interview. A group which comprises six members from each sample schools took part. There was a free discussion among them. The discussion was followed by probing questions and a tape recorder/because the researcher knows the participants in his work-place and told them frankly that the purpose of this research is only used for the consumption of the researcher; so that the respondents became free/.

Additional comments were given by group members after they heard the questions posed by the researcher and the response of others. From each focus group, then, responses were collected in tape-recording. All the FGDs were held in comfortable rooms and calm situations so that there were no encountered problems. Finally, discussions were taped, transcribed and analyzed.

3.4.4 Interview

Interviewing gives the required information verbally and in face to face situation [MOE, 2002]. It is useful to understand reasons why and how things happen and the way they are happening. It supports to obtain relevant data that will not be handled by questionnaire and essential to counter check the information already obtained. Principals were selected

for interview purposely since, they have been responsible for instructional activities that were going on in schools. They are also the ones who evaluate, follow-up and report the practice of active-learning method in their schools. Therefore, they have detailed information to what extent active-learning methods were applied. This helped the researcher to get more information on the issue and strengthen the study. Based on this assumption, the researcher used structured interview. From nine sample schools nine directors/principals were interviewed. During the interview notes were taken carefully. The interview was conducted for 30-40 minutes with each principal in his/her office.

The questionnaire, focus group discussions and interview guide were set in English and then transcribed and administered in Amharic for information clarity on the part of the respondents. In fact, all have the English versions enclosed in the appendix.

3.5 Pilot Testing of the Instruments

The qualities of the instruments were examined by the academic advisor and then they were tried out for piloting. A pilot was done with 20 respondents in one non-sample first cycle primary school. As indicated in Best and Kahn [2005], the purpose of this test was to check the appropriateness of the items in the instruments by avoiding errors related to language, ideas and contents and validate the framed items and to make the necessary correction based on the feedback obtained. Internal consistency of the tests was also computed. Accordingly, modifications were made for some of the items and the development of the attitude scale was found to be reliable having a coefficient alpha Cronbach of 0.79.

3.6 Methods of Data Analysis

In this study, both quantitative and qualitative analytical procedures were employed. Accordingly, percentages, frequency counts and mean values were used to analyze the attitude scale items of the questionnaire. Information generated from the open-ended questions, focus group discussions, interview and class-room observation, were presented and narrated qualitatively. Tables were also used in organizing the data and tabulating the results.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND DISCUSSION OF DATA

This chapter deals with presentation, analysis and discussion of data. It is divided into two main parts. The first part deals with the background information of the respondents and the second, with the presentation, analysis and discussion of the data related to the conception and practice of active-learning method in first cycle primary schools of Awi Administrative zone.

4.1 Background Characteristics of the Study Groups

Based on the responses obtained from teachers and principals, the characteristics of the study groups were examined in terms of sex, age, qualification and years of service as indicated in the table below.

Table 2: Characteristics of Teacher Respondents by their Sex

No	Sex	No. of teachers	%
1	F	66	73.3
2	M	24	26.7
Total		90	100

As indicated in table 2, out of the total 90 teachers, 66 (73.3%) of the teachers are females and 24 (26.7%) of them are males. The number of female teachers is greater than male counterparts. This clearly shows how females are encouraged to join the profession. Interestingly, this idea corresponds to the policy of MOE (2002), which stated that more females should be encouraged to join the teaching profession at the primary school level for they are naturally endowed with a motherly care, which kids are badly in need of. Normally, female teachers are receptive to new ideas and eager to practice what they know. Thus, the data is collected from those who may do what they know.

Table 3: Characteristics of Teachers by their Age

No.	Age- range	No. of teachers	%
1	21-30	66	73.3
2	31-40	14	15.6
3	41-50	10	11.1

Table 3 showed that the age of the respondents range from 21 to 50 years, where by 66 (73.3%) fall in the age range 21-30. The majority of them thus belong to the youngest age groups, who have got training quite recently.

Table 4: Educational level of Teacher

No.	Qualification	No. of teachers	%
1	Certificate	90	100
2	Diploma	-	-

As it is indicated from the above table, all the teachers, 90 (100%) in the sample schools are graduates from teachers' training institutes (TTI). This implies the educational level of teachers who are supposed to teach at the first cycle primary school is maintained according to the educational policy. However, due to the increasing complexity and dynamic nature of education, teachers are expected to be more qualified beyond this level.

Table 5: Teacher Respondents Composition by their Years of Services in Teaching

No.	Years of services	No. of teachers	%
1	0-10	68	75.6
2	11-20	10	11.1
3	21-30	12	13.3

As far as the length of service of teachers is concerned, most of the teachers, 68 (75.6%) have an experience that ranges from 0-10 years. Where as the remaining 22 (24.4%) have an experience more than 10 years. As a result of this, the new teachers and well experienced teachers can share experience from each other.

Table 6: Summary of Background Characteristics of Principals

No	Items	Principals [No =9]		
		No	%	
1	Sex	M	8	88.8
		F	1	11.1
2	Age	21-30	2	22.2
		31-40	6	66.6
		41-50	1	11.1
3	Qualification	Certificate	9	100
		Diploma	-	-
4	Experience	0-10	5	55.5
		11-20	4	44.4
		21-30	-	-

As indicated in table 6, the majority 8(88.8%) of the principals assigned in the sample schools were males. Where as only 1(11.1%) principal is female. This implies that female participation as school principals in the

first cycle primary schools of Awi Administrative zone is low. The idea here is male dominated data is collected. It may be one sided in its nature.

This table also disclosed that the majority of school principals 6(66.6%) included in the study were between the age range of 31-40. Concerning qualification of the principals included in this study, all the principals were trained and appropriate to the school level they were assigned. i.e. 9(100%) principals were graduated from TTIs for first cycle primary schools (1-4). This implies that the education level of principals is maintained according to the education policy. The same table also showed that more than half i.e. 5(55.5%) of the principals have served for 0-10 years. The implication is that, most of the principals are familiar with the recent active-learning innovation so that they can run accordingly.

4.2 Analysis of the Conceptions and Practice of Active-Learning Methods in First Cycle Primary Schools.

In this section, the data obtained from different sources such as questionnaires, observation, focus group discussion and interview are presented, analyzed and discussed.

4.2.1 Teachers' Conception of Active-Learning Methods

Since teachers are implementers of any innovation of classroom teaching, they are among the most influential factors in the education system. As a result, the success or failure of any teaching method ultimately depends on the attitudes, values, skills and ability of classroom teachers that they have. This implies that teachers' belief is the determining factor for effective practice of active-learning method.

In order to analyze and interpret the conception of teachers about active-learning method, attitude scale was used. The responses indicating degree of strength of understanding of teachers from strongly agree to strongly disagree were set. Arbitrary scoring weights of 5,4,3,2, and 1 were used for strongly agree, agree, undecided, disagree and strongly disagree, respectively for statements favoring a point of view of learner-centered method. On the other hand, the scoring weights of 1,2,3,4 and 5 were used for respective responses for statements opposing the point of view of learner- centered method as used by Kaul (1996).

To Best and Kahn [2005], in order to make the analysis simple for presentation, it is possible to condense the 5-point attitude scale in to three. i.e. strongly agree and agree are organized together as one item agree. Similarly, disagree and strongly disagree summarized together as disagree where undecided is put as it is, as indicated below (the raw data is enclosed in the appendix).

Table 7: Summary of Teachers Response on their Understanding of Active-Learning Methods

NO	Items		Agree	Undecided	Disagree	Mean
1	AL is a teaching strategy using a variety of techniques.	N	90	-	-	4.8
		%	100	-	-	
2	Employing ALM improves pupils' learning.	N	88	1	1	4.6
		%	97.8	1.1	1.1	
3	AL enables me to look in to the performance of students.	N	85	3	2	4.5
		%	94.4	3.3	2.2	
4	SCM can increase student engagement in learning better than TCM.	N	89	-	1	4.7
		%	98.8	-	1.1	
5	Learning is the responsibility of the learner.	N	53	13	24	3.6
		%	58.9	14.4	26.7	
6	In ALM students do most of the work by themselves without the help of the teacher.	N	38	12	40	2.9
		%	42.3	13.3	44.4	
7	Teachers' role is less important in LCM than in TCM.	N	50	7	33	2.6
		%	55.6	7.8	36.7	
8	One of the indicators of active learning is providing challenging task for students.	N	61	7	22	3.7
		%	67.8	7.8	24.4	
9	Learning occurs when learners are silent and receive information from teachers.	N	4	3	83	4.3
		%	4.4	3.3	92.2	
10	Learning is effective when teachers have good knowledge of subject matter they teach.	N	74	6	10	1.8
		%	82.2	6.7	11.2	
11	It is not useful to provide time for students to think and increase the quality of their response.	N	4	7	79	4.02
		%	4.4	7.8	87.8	
12	AL is an effective approach since it develops learner self-confidence, participation, motivation and better study skills.	N	84	4	1	4.5
		%	93.3	4.4	1.1	
13	I am well trained to put in to practice ALM in the classroom.	N	57	4	29	3.4
		%	63.3	4.4	32.3	
14	Teachers have the required understanding about ALM in our case	N	23	7	60	3.6
		%	25.6	7.8	66.6	
15	AL is inappropriate to implement in the first cycle primary schools	N	11	7	72	3.9
		%	12.2	7.8	80	
16	Since the WEO developed a clear guideline about AL, teachers find it simple to manage	N	38	9	43	1.7
		%	42.2	10	47.8	
Grand mean						3.55

N= Number/frequency count %= Percent

N.B. In order to know their level of awareness, data have been collected from teachers through questionnaire. The responses are organized in the above table. The responses of the teachers were transformed in to mean. Because the mean [arithmetic average] is probably the most useful of all statically measures since it provides appropriate information [Best and Kahn, 2005]. Therefore the average mean value of the data gathered from the respondents was classified and interpreted relatively as.

<i>Strongly disagree</i>	<i>1.0 -1.9 (very low level understanding)</i>
<i>Disagree</i>	<i>2.0-2.9 (low level understanding)</i>
<i>Agree</i>	<i>3.0-3.9 (high level understanding)</i>
<i>Strongly agree</i>	<i>4.0-5 (very high level understanding)</i>

As it can be seen from Table 7 of item one, all the respondents 90 (100%) agreed that active-learning as a teaching strategy, which has a variety of techniques with the mean value of 4.8, which is very high. However, the result from classroom observation revealed that most teachers did not use the different techniques of active-learning methods except group-work in the real classroom situation. Moreover, the principals also confirmed this when they were interviewed. This implies that even though teachers understood the different techniques of active-learning method they did not practically apply in the teaching-learning process.

As it is indicated above on item 2, almost all of the respondents 88 (97.8%) believed that employing active-learning method in the classroom improves pupils' learning. Its mean value was 4.6, where as only 1 (1.1%) disagreed on the issue and similarly the other 1 (1.1%) did not show either agreement or disagreement. Moreover, the result from focus group discussion revealed that teachers completely agreed on the importance of active-learning method for pupils' learning so as to make them effective if it is properly handled. Therefore, this basic issue of active-learning method was properly conceived by the respondent teachers included in the study.

The result of item 3 of table 7 showed that almost all of the respondents 85 (94.4%) agreed on the issue of active-learning which enables teachers to see the performance of their students. Few of the respondents 2 (2.2%), however, disagreed on the issue and the other 3(3.3%) didn't show either agreement or disagreement. Similarly, almost all of the respondents 89 (98.8%) showed agreement on the issue of item 4 that student-centered method can increase student engagement in learning better than teacher-centered method. This confirmed the idea of Silberman (1996) who elaborates that active-learning refers to the level of engagement by the student in the instructional process. It is an approach that gives a due emphasis to the learner to be an actor in learning and searching solutions rather than to be dependent only on the teacher. The responses to both items favored highly towards the principles of active-learning method with the mean value of 4.5 and 4.7 respectively.

What can be said from the above finding is that during active-learning method learners are the builders and creators of meaning and knowledge through active participation in the learning process. In doing so, students' engagement in learning is highly increased in active-learning method than teacher-centered method. At the same time teachers can get an opportunity to see or assess the performance of their students practically. Thus, these fundamental issues were properly understood or conceived by the respondents in the study.

A close examination of table 7, reveal that the majority of the respondents 53 (58.9%), in item 5 reported that as they agreed on the responsibility of the learner on learning and the mean value for this item was 3.6, which is high. Regarding the responsibility of learner in learner-centered classroom, Temechegn (2001) emphasized that the learner has full responsibility for his/her own learning. Learning is self-initiated and

often involves the process of inquiry and discovery. Even though, this basic principle of active-learning method was not properly conceived by 24 (26.7%) and 13 (14.4%) of the respondents.

As a result of item 6 from table 7 depicted, most of the teachers 40 (44.4%) didn't believe that in active-learning method, students do most of the work by themselves without the help of the teacher. The teacher is there in order to guide, coach and facilitate the students during the learning process. The learners can do nothing without his/her help. Therefore, this group of respondents correctly perceived this principle of active-learning method with the mean value of 2.9 which is almost nearer to high. In addition to this, the result from classroom observation made by the researcher in the classroom setting confirmed that students did most of the work with the guide of their teachers. Yet, a considerable number of respondents 38 (42.3%) accept this idea differently and the other 12 (13.3%) respondents didn't show either agreement or disagreement.

The item which says "Teachers role is less important in learner-centered method than in teacher-centered method" is indicated in the above table no. 7. The majority of teachers 50 (55.6%) agreed on this idea with the mean value of 2.6, which is low. That is, the respondents did not perceive the role teachers play in active-learning method. Regarding the role of the teacher in the learner-centered method, Oser et.al (1992) indicated that the teacher is not less important in learner-centered methods than in the teacher-centered classroom. He/she has a great responsibility to guide and manage the activities and make sure that all students are working productively on the activities and monitor the progress of all pupils. On the other hand, some respondents 33 (36.7%) disagreed on this item and the other 7 (7.8%) respondents didn't show either agreement or disagreement.

As it is indicated in table 7 of item 8, the majority of respondents 61 (67.8%) agreed on the issue that providing challenging task for students is one of the indicator of active-learning. Its mean value is 3.7. This goes with the idea of Jones et.al (1994) that states tasks need to be challenging (to be done in collaboration with peers, mentors, family), authentic (relevant to home and work place) and multidisciplinary (involves problem solving and projects) as indicators of active-learning. However, some of the other respondents 22 (24.4%) did not accept this idea and only 7 (7.8%) respondents did not show either agreement or disagreement. Though, the majority of teachers reacted positively towards this concept, the classroom observation made by the researcher showed that most teachers in the real classroom setting were not practically applying. They were observed providing simple tasks for their students. This indicates that there was no as such good practice of active- learning methods in the classroom.

The next item located in the likert scale is “Learning occurs when learners are silent and receive information from teachers”. This was not accepted nearly by all respondents 83 (92.2%) with the mean value of 4.3 where as very few of the respondents 4 (4.4%) agreed that students learn by simply being silent and receive information from teachers. The other 3 (3.3%) respondents didn’t show either agreement or disagreement.

The above finding implies that knowledge is not something that can be simply given by the teacher from the textbooks to students who are passive and silent in their seat. Rather, it is constructed by the learners through active participation in the learning process. Thus, this basic issue was properly conceived by the teachers included in the study.

Item 10 is about effectiveness of learning. That is learning is effective when teachers have good knowledge of subject matter they teach. The majority of the respondents 74 (82.2%) agreed on this issue with the

mean value of 1.8, which is the lowest one. These respondents tried to relate learning with subject matter knowledge of teachers. But for effective learning, the role the learners play in the process of learning is not well considered. In line with this, Amare (2000) suggested that good teachers' qualities and good teachers' knowledge of subject matter do not necessarily result in effective learning. Students learn more when they have internal commitments and the will to learn as the process of learning in an active process and not a passive one. It is the learners' activities and not the activities of their teachers that result in learning. Therefore, this basic concept of active-learning method was wrongly perceived by the majority of teachers in this research.

Item 11 of table 7 says "It is not useful to provide wait time for students to think and increase the quality of their response". The majority of teacher respondents 79 (87.8%) didn't agree on this idea with the mean value of 4.02. i.e., this group of teachers understood the importance of time for critical thinking. In this regard, Eggen and Kauchak (2001) argued that giving students' time to think about their answer increases the quality of student responses significantly. However, as it was seen from the classroom observation made by the researcher, teachers didn't apply it practically to the extent of their conception in the real class room situation. That is, after posing questions, they didn't allow wait time for students and at the same time the response from students were immediate. Thus, from this one can conclude that most teachers seem to have good conception of this active-learning technique, even though it was not practiced in the class.

The result from table 7 of item 12 showed that almost all respondents 84 (93.3%) perceived active-learning as an effective approach with the mean value of 4.5. In line with this, Lea et.al (2003) reviewed several studies on student-centered learning and found out that it was an effective

approach. Because it developed better study skills and understanding; it increased students' participation, motivation; there was more respect for the student in this approach that it was more interesting, existing and it boosted their confidence. Along with this perception, findings from FGD indicated that the majority of the teachers considered active-learning as an effective approach since it develops learner-confidence, participation, motivation and better study skills. For instance, one of the informants factiously named Tenkir suggested:

...During the application of active-learning method, students can learn by reading, writing, freely discussing ideas with his/her colleagues and reflecting their opinion to the class. So that they can develop self-confidence. In doing this, students never forget things easily rather learn deeply as a result of learning by doing. Since this method of teaching is effective by itself, on the other way round, it also helps to make our students effective.

The data in table 7, item 13 revealed that most of the respondents 57 (63.3%) agreed with the idea that teachers have got training, which enables them to practice active-learning method in the classroom. Its mean value was 3.4. On the other hand, 29 (32.3%) of the respondent teachers didn't agree with this idea.

The implication of the above finding is that during pre-service training in TTIs and other related programs held at the school level plays a vital role in creating the awareness of teachers' about ALM of teaching and making them effective in the process of practicing. This is also confirmed by the interviewed school principals.

Item 14 of the same table revealed that most of the respondents 60 (66.6%) admitted that as they do have the required understanding about active-learning method with the mean value of 3.6. Despite this, some respondents 23 (25.6%) didn't accept this idea. Still others 7 (7.8%) didn't either agree or disagree on the issue.

More specifically, this implies that teachers do not have conception problem of active-learning method of instruction and this in turn has an impact on their practical implementation. Of course, most teachers in this study know this new innovation and this is also confirmed from FGD and interviewed principals. In connection with this, Yetwal, one of the respondents in the FGD expressed:

...Now a day, as to me, we teachers don't have problems of conception of active-learning method. This is not only because of pre-service training but also the on going program of continuous professional development (CPD) held at the school level. This program paved the way for me to get direction from my mentor and learn among our selves and share experience so that its impact on our understanding of the issue is not simple.

However, what was seen practically in the real classroom during observation is that, teachers as to their conception, were not effectively practicing this innovation.

The finding from item 15 of table 7 showed that the majority of teachers 72 (80%) reported that the appropriateness of active-learning to implement in the first cycle primary schools with the mean value of 3.9 where as, the other 11(12.2%) respondents believed the inappropriateness of active learning for first cycle primary schools and the other 7(7.8%) respondents didn't either agree or disagree with this issue.

This implies that the majority of teachers know the appropriateness of active-learning to be implemented in the first cycle primary schools. Since, this innovation is required to be implemented at all levels of the education system including the first cycle primary schools in the country [MOE,2002].

The last item in this likert scale is about the preparation of active-learning guideline. Regarding this, some of the respondents 38 (42.2%) found active-learning simple to manage in the classroom for there is a guide line developed by Woreda Education Office. In contrast, the majority of these respondents 43 (47.8%) showed disagreement and few of them 9 (10%) neither agreed nor disagreed on it.

It is true that guidelines are procedures that should give directions for teachers as to how they can handle active-learning method smoothly [mulken,2006]. However, most of the Woreda Education Office didn't prepare it. So that it may be difficult for teachers to manage practically in the classroom. Moreover, this is also confirmed from the interviewed principals. i.e. Almost all of the principals reported that the WEO did not give as such good support regarding instructional methods. Rather, the supervisors assigned at the cluster level try to provide professional support and advice to teachers on teaching methods and solve certain problem immediately.

In general, from the discussion made so far one can understand that teachers included in the study have relatively high level understanding of the principles of active-learning method. The grand mean score of 3.55 on the scale confirmed this.

4.2.2 Findings and Discussion from Open-Ended Questions, FGD, Interview and Observation

As indicated earlier, this study employed different data gathering tools so as to enrich and supplement the information gathered from the respondents using a questionnaire. Hence, the results from open-ended questions, FGD, interview and observation were presented as follows.

4.2.2.1 Active-Learning Method as Conceived and Practiced by Teachers

It is believed that the attitudes of teachers have a great impact on the effective implementation of active-learning strategies. In other words, there is a close relationship between conception and actual practices. Thus, it is important to know the conception of teachers about active-learning and the general practices in the school context.

More specifically, the result in this sub-section revealed that most of the respondents understood active –learning method properly. In connection with this, Ayana, one of the respondents in FGD said:

...The continuous professional development /CPD/ program held at the school level, the organization of the schools in a cluster and the assignment of cluster based diploma holder supervisors contributed a lot for our understanding and updating of the current innovation such as active-learning method and continuous assessment techniques.

This is not only the experience of Ayana but also the other respondents in the sample schools. Similarly, all principals reported that, in order to increase the awareness of teachers about active-learning methods, they used discussion during staff meeting, facilitating CPD program, and share of experience from other schools within the cluster and across cluster by the coordination of the supervisors assigned. As a result of this, they said that most teachers have the required concept about active-learning methods. Even though, teachers have this conception of active-learning, surprisingly, they can not make it fully practical as it was confirmed from the classroom observation made. For instance, almost all of the observed teachers in the classroom used only one technique of active-learning method which is group work with some oral questions.

Concerning with the practice of active-learning in the school context, the majority of the respondent teachers and principals reported in the open-

ended questions and interview respectively that, as the condition allows us there is a start to some extent in practicing active-learning in the teaching-learning process but its magnitude is not as such significant. In relation to this issue, one of the informants, Abeba, from FGD expressed:

...We teachers, as we conceptualize active-learning, we can't fully apply it practically in the real classroom situation because of many problem, among which lack of conduciveness of the school environment is the major one. Thus, I don't dare to say that we are fully practicing active-learning as it requires of us.

Moreover, to see practically the activities of teachers in implementing active-learning method a series of classroom observations were also made and the data gathered is organized as follows:

Table 8: The Activities of Teachers Observed

No.	1. Teacher's Activities	Yes		No	
		N	%	N	%
1.1	Prepares lesson plan in line with ALM	18	85.7	3	14.2
1.2	Assesses students prior knowledge and experience	5	23.8	16	76.2
1.3	Motivates learners to participate actively in the classroom	9	42.9	12	57.1
1.4	Provides challenging tasks	5	23.8	16	76.2
1.5	Makes the classroom democratic and interactive	13	61.9	8	38.1
1.6	Allows students to be involved in decision making	7	33.3	14	66.7
1.7	Uses various techniques of ALM	4	19.1	17	80.9
1.8	Uses various instructional materials	4	19.1	17	80.9
1.9	Asks close-ended questions	20	95.2	1	4.8
1.10	Asks open-ended questions	1	4.8	20	95.2
1.11	Allows wait time after posing questions to understand the questions	6	28.6	15	71.4
1.12	Relates class topics with student life	14	66.7	7	33.3
1.13	Assigns students in groups	17	80.9	4	19.1
1.14	Uses ALM during introduction	5	23.8	16	76.2
	Uses ALM during presentation	16	16.2	5	23.8
	Uses ALM during stabilization	2	9.5	19	90.5
	Uses ALM during assessment	6	28.6	15	71.4
1.15	Uses lecture method/explanation	17	80.9	4	19.1

As indicated in the above table, almost in all the classrooms, teachers were preparing lesson plan in line with active-learning method but they were not fully guided by using it. For instance, one of the lesson plans checked by the researcher during observation was prepared in line with active-learning lesson plan format already set. Under the column of “teaching method” role playing technique “**ሚና ጩዋታ**” was written. Similarly, things were written under the column of “student activities” such as actively participate, discuss, ask, summarize etc. But these were not practically implemented during classroom teaching rather they remained as paper work. The majority of teachers were not assessing students’ prior knowledge and experience before starting the subject. Most of the observed teachers did not motivate learners to participate actively in the classroom so as to increase their engagement in the learning process. Similarly, in most of the classrooms observed, teachers were not in a position to provide challenging tasks. Instead, they provided simple tasks. This contradicts with the idea of Jones et al (1994), who suggested that tasks need to be challenging to be done in collaboration with peers, mentor and family.

In most of the classrooms, teachers tried to make the classroom democratic and interactive for students to express their idea freely. However, most teachers dominate in decision-making about teaching and assessment without involving their students. On the other hand, almost in all the classrooms, teachers were not using various techniques of active-learning method. This was confirmed by the school principals. Rather, they used group work regularly with some oral questions in addition to the lecture method in the teaching learning process. In a similar fashion, teachers did not use various instructional materials in the classroom. So that it affects the quality of teaching-learning process. However, in order to make learning effective and help students to acquire different experiences, teachers must use various instructional materials.

Regarding this, Amare (1999), emphasized that instructional materials provide the learner with a wide variety of experiences such as doing, drawing, reading, listening, observation, sketching, speaking, discussing, computing, reporting, researching and thinking.

Concerning questioning techniques, in almost all the observed classrooms, teachers were asking close-ended questions. This is similar to the finding of Dillion (1988) as cited in Wendemagegnehu (2006), which says that even though open-ended questions are believed to be more capable in generating active-learning classroom events than close-ended questions. Most of the class questions asked by teacher were found to be close-ended. However, Plass (1998), recommended that teachers' questions should be open-ended that help students to articulate and defend or modify their opinions and to feel confident about their knowledge. But, as explained earlier, the questions usually asked and occupy significant class time were close-ended. Where as, questions which require times to reason out logically were not asked. On top of this, the results from classroom observation indicate that there was no time given for students to think on questions asked. The students provide a rapid response for their teachers.

The result from table 8, from the observation list showed that a significant number of teachers were tried to relate those topics taught in class with that of the real life situation of the students in the outside world. This helps students not to forget things easily. Similarly, this table indicated that group work was the most commonly used and observed technique of active-learning method. Though, group work is one of the fundamental techniques used in active-learning classroom, sometimes, assigning students simply in to different groups doesn't ensure effective learning. As the researcher observed, if each and every student is not

actively participate in the group, simply using group work becomes meaningless.

As seen from the above observation check-list, the majority of teachers used active-learning method during lesson presentation. Where as the remaining teachers used during introduction, stabilization and assessment. This finding is almost proportionate with the result of the study made by USAID (2007), on active-learning practice from 2003/04-2006/07, which suggested that over the years, it was possible to see active-learning practice in both teacher education institution and cluster schools. It is interesting to see teachers when very strongly use active-learning method during presentation of lesson subject matters. However, the use of active-learning method in lesson introduction, stabilization, and assessment is lower than presentation of lesson subject matters.

Of course, the study made by USAID is focused on those particular primary cluster schools and teacher training institution supported by USAID/Basic education program. Since, there might be some sort of particular attention given, a considerable progress of active-learning practice was shown. Therefore, the degree of active-learning practice in these supported primary cluster schools might be stronger than those schools which are not supported in this program/like the sample schools used in this study/.

On the other hand, what the researcher observed is that, the majority of teachers were still relied more on using the traditional lecture method. That is, teachers were using the lecture methods over half of the period in addition to group work.

Generally, as indicated in the above table, based on fifteen different statements of the check-list, the classroom observation was made with the intention of assessing teachers' practice of active-learning methods in

the classroom. As a result of this, currently, the extent of the practice of active-learning in Enjibara, Banja and Guagusa shikudad woreda is not as such effective as expected in the zone.

In addition to the activities of teachers, the researcher also observed the students' activities side by side based on the different items listed on the check-list (enclosed in the appendix). Thus, most of the students were not actively participate, not reflect their understanding, and not involved in the process of decision-making etc. Even though, students can make great contribution and play a significant role in active-learning methods, however, students were not acting accordingly. These affect the whole activities of the teacher during the implementation of the innovation.

4.2.2.2 Major Problems Faced in Implementing Active-Learning

The practice of active-learning method in school context is complex though it seems simple. Broadly speaking, there are quite a number of problems that hinder the effective use of active-learning. The evidences from open-ended question, FGD, observation and interview indicated that almost all of the respondents pinpointed the major problems that they faced for not using active-learning smoothly in their school. Accordingly, the major problems include:

Large Class Size

The respondents underlined that attempting to practice active-learning with large number of pupils in a class is a big challenge. In connection with this issue, Tadelech, one of the respondents in FGD said:

...imagine how difficult to implement effectively active learning method in a situation where there is 70 pupils in a classroom. Had there been few number of pupils, it would have been manageable for active-learning to be practiced. For us, it is a challenge.

This goes with what Smith (1996) has mentioned, “Large class size is the major limiting factor that affect the use of active-learning method”. Similarly, Hayes (1997) underlined the problem of large class size for teachers in terms of classroom management and assessment of students’ work. At this point, it is not hard to understand that managing and assessing large group of students in the classroom is a big challenge for teachers. Of course, the optimal class size which is targeted by MOE is 50 for primary level. Despite this, the actual situation is far from what was intended.

Shortage or Absence of Instructional Materials

Lack of adequate instructional materials is another challenge for teachers to implement active-learning in their school context as it was indicated from the result of open-ended questions and interview. The quality of teaching and learning can be highly influenced by the availability and usage of instructional materials. As indicated by Aggarawal (1997), effectiveness in learning lies not in reading and listening but in action, performance and experience using different instructional materials. As a result for the application of active-learning method of teaching effectively, different instructional materials must be available and used.

On top of this, the result from FGD indicated that the majority of respondents replied as there were no instructional materials that can help to implement active-learning methods of instruction in their schools, where as some others replied that there were few instructional materials that can help for the implementation of the methods. This has been confirmed by the researcher through direct observation. Thus, the shortage and non-availability of instructional materials might have played their part in affecting the implementation of active-learning method in the first cycle primary schools.

School Facilities

The physical condition of a classroom, the availability of desks, chalk board, pedagogical center, library and science kit can facilitate or hinder the implementation of active-learning methods. In connection with this, Henveld and Craig (1996) mentioned that there should be adequate, well-maintained and furnished classrooms to effectively conduct the teaching-learning process. Classrooms are adequate when there is desk for every pupil and when it is well-ventilated with good light and there is a standardized chalk board for every class. The researcher also observed the classrooms of sample schools and summarized the data as follows:

Table 9. Observed School Facilities

No	School facilities	Schools																	
		Bahunk		Chewsa		kessa		Jibayita		Hibert		Askuna		Abisela		Total			
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	%	No	%
1	Availability of desks	X	-	-	X	-	X	-	X	-	X	-	X	-	X	1	14.3	6	85.7
2	Standardized chalk board	X	-	-	X	X	-	-	X	X	-	-	X	-	X	3	42.9	4	57.1
3	Attractive and neat classroom	-	X	-	X	-	X	-	X	X	-	X	-	-	X	2	28.5	5	71.4
4	Well ventilated classroom with bright light	X	-	X	-	-	X	X	-	X	-	X	-	-	X	5	71.4	2	28.5
5	Free space to facilitate different sitting arrangement	-	X	X	-	-	X	-	X	X	-	-	X	-	X	2	28.5	5	71.4
6	Availability of teaching aid in the class	X	-	-	X	X	-	-	X	-	X	-	X	-	X	2	28.5	5	71.4
7	Pedagogical center equipped with necessary materials	X	-	-	X	X	-	-	X	X	-	-	X	-	X	3	42.9	4	57.1
8	Library	X	-	-	X		-	-			-	-		-	X	3	42.9	4	57.1
9	Science kit	X	-	-	X	X		-	X	-	X	-	X	-	X	2	28.5	5	71.4

As depicted in the above table, from the observed seven schools, six of them have no desk for each student. Where as only one school has desk for every student. Even the desks in this school were fixed so that it is not movable as required. In most schools the black boards were very small and below standard as a result of this it difficult to write on them some times. When we see the nature of the classroom, most schools were not attractive and net; they do not have free space to facilitate different sitting arrangements and there were shortages of teaching aid in the class. Similarly, in most of the observed schools, pedagogical centers and libraries were absent or not equipped with sufficient materials. In addition to this, almost all of the observed schools do not have science kit at all. From this one can conclude that the facilities of the observed schools were not conducive to implement active-learning method of instruction. This idea goes with the ideas of Temechegn (2001) who suggested that the physical lay out of classrooms in Ethiopian schools is a factor that is not conducive to learner-centered application.

The physical environment, which includes the change of classroom, lay out and appearance to make change in sitting arrangement contributes a lot to promote active-learning method. It is possible to arrange different sitting arrangement that can facilitate active-learning method of teaching if the desks are movable. But, since the desks are not movable some schools formed a fixed sitting arrangement for group-works. Sometimes, it is difficult for teachers to move and facilitate students' activities during group work. In contrary to this, Silberman (1996) suggested that some of the sitting arrangements for learner-centered methods are U-shape, team style, conference table, etc. However, the nature of schools observed was not conducive, so that, it is difficult to use these different sitting arrangements. As a whole, all the observed sample schools lack sufficient facilities that can promote active-learning methods of instruction. Therefore, problems of school facilities were one of the factors that affect

negatively the implementation of active-learning method in the first cycle primary schools of Awi zone.

Organization of Curriculum Materials

The organization of curriculum materials involves the preparation of textbooks, syllabus, teachers' guide and other similar materials to be used by teachers and students. For instance, text books are one of the most frequently used teaching materials prepared by experts for the purpose of achieving the intended objectives of education. They are of great value as they serve as a means but are not ends by themselves. It is through these materials that teachers and pupils communicate with each other in an effort to carry out the teaching-learning process.

As it was indicated from the result of open-ended questions, and interviewed principals, organization of curriculum materials /content loaded text book is one of the factors that affect the implementation of active-learning instruction. In addition to this, during FGD, the majority of the respondents expressed that some text books were prepared with full of information which contains too much contents that do not lead to application. In relation to this idea, Lue (2000) elaborated the problems of teachers in such away that "Teachers will often skip over these activities and go on to the next unit because they are pressed to 'get through' the book to 'cover' or present all the information contained in the book".

This greatly reduced the creativity of the learners by their own and in turn hinders the practice of active-learning. In line with this idea, one of the respondents in the FGD, who teaches environmental science in grade four also expressed his feeling by saying that:

...To tell you frankly, I didn't give much attention to do those activities and exercises in the student textbooks. Simply, I will jump over these activities and go on to the next topic because of fear of the endless portion. I am forced to get through the book in order to cover or present all the information contained with in the expected time range. Moreover, in a situation where there is no science kit, it is unthinkable to do the activities practically.

The implication of this is that teachers were not doing the practical activities due to too much content of the textbook and in availability of the required science kit materials in the schools. It is true that in almost all the observed sample schools science kit were completely absent.

To sum up, as repeatedly mentioned above the organization of curriculum materials is one of the challenges in implementing active-learning methods for teachers.

In addition to the above major factors, some of the respondents for the open-ended questions, FGD and interview indicated that lack of continuous on-job training, teachers' work load, lack of commitment from the part of teachers and absence of motivation, are also the hindering factors, which affected the effective implementation of active-learning methods.

4.2.2.3 Recommended Solutions by the Research Participant

In order to minimize the problems that affect the implementation of active-learning methods, the respondent-teachers in the open-ended questions and FGD and principals during the interview recommended what they felt as the possible solutions and summary is presented as follows:

- The regional government and other concerned bodies should mobilize the community to participate actively and make the class size optimal
- Sufficient instructional materials need to be made available at school level.
- It is necessary to mobilize the concerned bodies or stake holders to play their part in improving school facilities.
- The high work-load of teachers should be reduced by assigning enough teachers on time so as to make them effective in handling active-learning instruction.
- Particular attention should be given to teachers by the government in order to motivate and make them efficient in implementing the new innovation like active-learning method.
- Further practical training should be given to teachers especially on the area of active-learning method of teaching.
- Revising the text books again so as to reduce the over crowded contents of the textbook.
- Allocating sufficient amount of budget to the schools in order to fill the gap.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This last part, chapter five, deals with the summary, conclusions and recommendations. In this section, there is a brief summary on the study with the major findings, followed by the conclusions made on the basis of the findings. Lastly, some possible recommendations are given on the basis of major findings of the study.

5.1 Summary

A study was conducted on the topic with a purpose of investigating the conception and practice of first cycle government primary school teachers about active-learning methods of instruction in Awi administrative zone. To attain this, nine government first cycle primary schools were selected randomly from three woredas. To meet this purpose the following basic questions were set to be answered in the course of the study.

1. How do primary school teachers' in the first cycle conceive active-learning methods?
2. How do first cycle primary school teachers' practice active-learning methods in Awi zone?
3. What factors affect the implementation of active-learning methodology in Awi Administrative Zone?

In order to answer these basic questions, a descriptive survey research method was employed. The data were collected from 90 teachers and 9 school principals selected using availability sampling technique and purposive sampling technique respectively. The data relevant to the study were gathered through questionnaire, observation, focus group discussions and interview. In analyzing the data both quantitative (using

frequency counts, percentages and mean values) and qualitative methods were applied.

Based on the analysis made the following major findings were found:

- ❖ A considerable number of teachers do have relatively the required understanding about active-learning method with the grand mean of 3.55; even though they didn't practice it in the classroom in light of their views. Some of the others, however, didn't clearly understand the innovation.
- ❖ The finding of this study disclosed that active-learning methods in the first cycle primary schools were not fully practiced yet as expected. That is, the magnitude of practicing active-learning approach is low. Teachers were still more relied on the traditional lecture methods.
- ❖ Teachers didn't employ a variety of active-learning techniques to measure the performance of their students in the learning-process. The common trend was using group-work with some oral close-ended questions. The other techniques such as discovery method, role playing, project method, concept mapping etc. are ignored or not used by the teachers of first cycle primary schools of the zone.
- ❖ Most of the respondents claimed that the woreda education office didn't discharge its role and responsibility in providing necessary support for the implementation of active-learning methods, which are used by teachers to make the practice simple and manageable.
- ❖ The study also revealed that large-class size, inadequacy of instructional materials, lack of school facilities, organization of curriculum materials, lack of further practical training, teachers' work load, lack of teachers' commitment and absence of motivation were some of the major factors that hindered the practice of active-learning method.

- ❖ Providing sufficient instructional materials, improving school facilities, reducing the class size and teachers work-load, reducing the contents of the text book, providing further practical training, allocating budget to schools were some of the suggested solution by the respondents.

5.2 Conclusions

From the view point of the findings obtained, the following conclusions were made.

- ❖ Teachers of first cycle primary schools of Awi Administrative zone have relatively high level of understanding of active-learning methods of teaching.
- ❖ The prevailing active-learning practice is poor; since teachers were not properly applying the methods in the class rooms in line with the principles of active-learning. It is difficult to say that active-learning methods are fully practiced in the first cycle government primary schools of Awi administrative zone.
- ❖ The implementations of active-learning methods were affected by many factors. These include: large class size, inadequacy of instructional materials, lack of school facilities, poor organization of curriculum materials, teachers lack of commitment and motivation, teachers work-load and lack of intensive practical training.

5.3 Recommendations

Based on the finding of the study and conclusion made, the researcher suggests the following recommendations:

- ❖ Further intensive practical training (i.e. in participatory approach) should be organized to strengthen and update the conception of teachers and for better practice on active-learning method in the

form of on-job trainings, work shop, seminars, and in-service program through videos, model projects and up to date literatures (guide manual) by the government and other stake holders.

- ❖ The regional government and other concerned bodies are expected to make an utmost effort to mobilize the society to increase their sense of belongingness on schools so that they participate actively in reducing the large number of students in a class to make the class size optimal.
- ❖ Instructional materials facilitate active-learning, encourage creative thinking, relate theory with practice and increase retention. But there is lack of these materials and teachers were not using teaching aids. As a result of these, school pedagogical centers need to be highly strengthened by the concerned Bureaus and non-government organizations through allocating budget and motivate teachers and students to play their part in preparing instructional aids from the local materials.
- ❖ The school conditions in relation to facilities need to be considered seriously for the effective implementation of active-learning method; the physical environment of a classroom has an impact on active-learning. Since, the schools do not have conducive school facilities for the practice of active-learning methods; those concerned bodies starting from the school principal, PTA, KETB and other higher officials should cooperatively work to mobilize the stake holders so as to improve it. The non-governmental organization should also be involved in assisting schools and the community need to see alternative solutions.
- ❖ Concerning curriculum materials, the content of some students' textbooks should be reduced to make the practice of active-learning manageable. To do this, inputs of knowledgeable and skilled professionals including teachers should be considered. The Institute of Curriculum Development and Research (ICDR) in

particular the regional Curriculum Department are highly responsible to keep the quality during their preparation. Training for curriculum developers and share of experience among regional curriculum departments may have a strong impact on their duty. So that, experts in the field must design and prepare in line with active learning methods by considering the real present situation of first cycle primary schools in the country.

- ❖ For effective implementation of active-learning method at the school level, the reduction of the weekly work-load of teachers need to be considered through hiring additional teachers on time by the Woreda Education Offices.
- ❖ Education authorities [like WEO] should provide support to schools for better performance in the teaching-learning process in a form of training, or providing current information and preparing guide lines /manuals and making share of experiences using a model school to fill the gap. Thus, the concerned bodies should act accordingly so as to run the practice of active-learning method smoothly.
- ❖ Lastly, it seems important to conduct further research on the area in order to know teachers' conception of active-learning method across years of teaching experience and gender dichotomy at all educational levels exhaustively.

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Appendix- A

Addis Ababa University
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Part One: Questionnaire for Teachers

The main purpose of this questionnaire is to gather information about the conception of teachers' towards active-learning and how it is practiced. Be confidential that the information gathered will be used only for the research purpose. Hence, you are kindly requested to provide the necessary information, which is very helpful to the quality of the research. You are not expected to write your name on the questionnaire.

Thank you is advance for your cooperation

II. Background Information

- Sex -----
 - Qualification -----
 - School -----
- Age -----
Experience -----
woreda -----

III. Here is a five point scale to measure your conception of active-learning. Please put a (✓) mark to show your level of agreement. The scales are strongly Agree= 5, Agree= 4, Undecided=3, Disagree=2, strongly Disagree=1.

No	Items	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1	As to me, active learning is a teaching strategy using a variety of techniques					
2	I feel that employing active-learning method improves pupils' learning.					
3	Active learning enables me to look in to the performance of students					
4	I believe that student-centered method can increase student engagement in learning better than teacher-centered method					
5	As to me, learning is the responsibility of the learner.					
6	In active-learning method students do most of the work by themselves without the help of the teacher					
7	For me, teachers' role is less important in learner-centered method than in teacher-centered method.					
8	I believe that one of the indicators of active learning is providing challenging task for students.					
9	Learning occurs when learners are silent and receive information from teachers					
10	In my opinion, learning is effective when teachers have good knowledge of subject matter they teach.					
11	As to me, it is not useful to provide time for students to think and increase the quality of their response.					
12	I consider active-learning as an effective approach since it develops learner self-confidence, participation motivation and better study skills.					
13	I feel that I am well trained to put in to practice active learning method in the classroom.					
14	It is difficult to infer that teachers have the required understanding about active learning in our case.					
15	As to me, active learning is inappropriate to implement in the first cycle primary schools.					
16	Since the woreda education office developed a clear guideline about active learning, teachers find it simple to manage.					

IV. Write out what you feel about the following questions

1. How do you make your students all rounded? Is it using active-learning method? If so, how? If not, what else?

2. How do you see the practice of active-learning in your school? Is it manageable? If not, why?

3. What do think are the major problems in implementing active-learning in your school?

4. Could you suggest possible solutions, if any, to tackle the problems related to the practice of active-learning in your school?

Appendix- B

Part Two: Focus group discussion for teachers

1. How do you understand active-learning?
2. How do you see active-learning method in making your pupils effective?
3. How do you update yourselves with the current innovation of active-learning?
4. Do you feel your school environment is conducive to implement active-learning? Are there enough instructional materials? Are there well-trained teachers? If not, explain?
5. What do you think are the problems faced in using active-learning method in the classroom?
6. Would you suggest possible solutions that help to minimize the problems behind active-learning?

Appendix- C

Part Three: Classroom observation checklist

1. Woreda ----- 4. Subject -----
2. School ----- 5. Total number of students in a class -----
3. Grade -----

No	Items	Yes	No	Remark
1	Teacher Activities			
1.1	Prepares lesson plan in line with active learning methods.			
1.2	Asses students prior knowledge and experience			
1.3	Motivates learners to participate actively in classroom			
1.4	Provides challenging tasks			
1.5	Makes the classroom democratic and interactive			
1.6	Allows students to be involved decision making			
1.7	Uses various techniques of active-learning method.			
1.8	Uses various instructional materials			
1.9	Asks close-ended questions			
1.10	Asks open-ended questions			
1.11	Allows wait time after posing questions for students to understand the questions.			
1.12	Relates class topics with students' life.			
1.13	Assigns students in groups			

1.14	Uses ALM during Introduction Uses ALM during Presentation Uses ALM during Stabilization Uses ALM during Assessment			
1.15	Uses lecture method/explanation			
2.	Activities of the Learner			
2.1	Passively listening to teachers talk			
2.2	Students are copying teacher notes			
2.3	Freely express ideas in the classroom			
2.4	Willingness to participate actively in group work			
2.5	Reflect their understanding to the class			
2.6	Involve in decision-making about method of instruction			
3	School facilities			
3.1	Availability of chairs and desks			
3.2	Standardized chalk board			
3.3	Attractive and neat classroom			
3.4	Well ventilated classroom with bright light			
3.5	Free space to facilitate different sitting arrangement			
3.6	Availability of teaching aid in the class			
3.7	Pedagogical center with variety of teaching aids			
3.8	Library with different reference materials			
3.9	Science Kit			

Appendix- D

Part Four: Summary of Teachers' response on their understanding of active learning methods

NO	Items		SA	A	UD	D	SD	Ef.v	\bar{X} /mean/
1	AL is a teaching strategy using a Variety of techniques.	F	70	20	-	-	-	430	4.8
		%	77.8	22.2	-	-	-		
2	Employing ALM Improves pupils' learning.	F	65	23	1	1	-	422	4.6
		%	72.2	25.6	1.1	1.1	-		
3	AL enables me to look in to the performance of students.	F	57	28	3	2	-	410	4.5
		%	63.3	31.1	3.3	2.2	-		
4	SCM can increase student engagement in learning better than TCM.	F	67	22	-	1	-	425	4.7
		%	74.4	24.4	-	1.1	-		
5	Learning is the responsibility of the learner.	F	28	25	13	17	7	320	3.6
		%	31.1	27.8	14.4	18.9	7.8		
6	In ALM students do most of the work by themselves w/out the help of the teacher.	F	14	24	12	37	3	261	2.9
		%	15.6	26.7	13.3	41.1	3.3		
7	Teachers' role is less important in LCM than in TCM.	F	23	27	7	23	10	240	2.6
		%	25.6	30	7.8	25.6	11.1		
8	One of the indicators of active learning is providing challenging task for students.	F	25	36	7	18	4	330	3.7
		%	27.8	40	7.8	20	4.4		
9	Learning occurs when learners are silent and receive information from teachers.	F	-	4	3	48	35	384	4.3
		%	-	4.4	3.3	53.3	38.9		
10	Learning is effective when teachers have good knowledge of subject matter they teach.	F	53	21	6	5	5	158	1.8
		%	58.9	23.3	6.7	5.6	5.6		

11	It is not useful to provide time for students to think and increase the quality of their response.	F	1	3	7	61	18	362	4.02
		%	1.1	3.3	7.8	67.8	20		
12	AL is an effective approach since it develops learner self-confidence, participation, motivation and better study skills.	F	55	29	4	1	-	405	4.5
		%	61.1	32.2	4.4	1.1	-		
13	I am well trained to put in to practice ALM in the classroom.	F	17	40	4	23	6	309	3.4
		%	18.9	44.4	4.4	25.6	6.7		
14	Teachers have the required understanding about ALM in our case	F	10	13	7	32	28	325	3.6
		%	11.1	14.4	7.8	35.5	31.1		
15	AL is inappropriate to implement in the first cycle primary schools	F	2	9	7	52	20	349	3.9
		%	2.2	10	7.8	57.8	22.2		
16	Since the WEO developed a clear guideline about AL, teachers find it simple to manage	F	9	29	9	20	23	151	1.7
		%	10	32.2	10	22.2	25.6		
Grand mean								3.55	

Appendix- E

Part Five: Interview guide for principals

Sex ----- **qualification** -----
Age ----- **years of service** -----

1. Do teachers in your schools use active-learning methods in teaching?
Do they employ a variety of its techniques?
2. What kind of strategies did you use to increase the awareness of teachers about active-learning method? Do they understand the innovation?
3. Is your school environment conducive for application of active-learning methods?
4. Do woreda education offices provide necessary support on the implementation of active-learning methods?
5. According to your opinion what are the factors that affected the practice of active-learning method in your school?
6. What do you think are the solutions to be taken in order to tackle the existing problems of active-learning practice?

Appendix- F

አዲስ አበባ ዩኒቨርሲቲ

የሰነ-ትምህርት ኮሌጅ

የስርዓተ-ትምህርት እና የመምህራን ሙያዊ እድገት ጥናት ትምህርት ክፍል ክፍል አንድ፡ በመምህራን የሚሞላ መጠየቅ

የዚህ መጠየቅ ዋና አላማ መምህራን በተማሪ-ተኮር የማስተማር ስነ-ዘዴ ላይ ያላቸውን ግንዛቤ ለማወቅ እና እንዴት እንደሚተገብሩት መረጃ ለመሰብሰብ ነው። የሚሰበሰበው መረጃ ለጥናቱ አላማ ብቻ የሚውል መሆኑን እርግጠኛ ይሁኑ። ስለዚህ አስፈላጊውን መረጃ እንዲሰጡን በትህትና እየጠየቅሁኝ እርስዎ የሚጡት አስተያየት ለጥናቱ መሳካት ወሳኝ ነው። ስም መጻፍ አያስፈልግም።

ስለሚደረግልኝ ትብብር በቅድሚያ አመሠግናለሁ።

I. አጠቃላይ መረጃ

- እድሜ ----- የትምህርት ደረጃ ----- ት/ቤት -----
- ያታ ----- የአገልግሎት ዘመን ----- ወረዳ -----

II. ከዚህ በታች መምህራን በተማሪ ተኮር የማስተማር ዘዴ ላይ ያላችሁን አመለካከት ለመመዘን የሚያስችሉ 5 መለኪያ ነጥቦች ቀርበዋል። በሚስማሙበት ነጥብ ላይ የ/✓/ ምልክት ያድርጉ። በጣም እስማማለሁ=5 እስማማለሁ= 4 መወሰን አልችልም= 3 አልስማማም = 2 በጣም አልስማማም= 1

ቁጥር	መመዘኛ ነጥቦች	በጣም እስማማለሁ	እስማማለሁ	መወሰን አልችልም	አልስማማም	በጣም አልስማማም
1	እንደ እኔ እምነት ተማሪ-ተኮር የማስተማር ስነ-ዘዴ የተለያዩ የማስተማር ስልቶችን ይጠቀማል።					
2	ተማሪ-ተኮር የማስተማር ስነ-ዘዴ የተማሪዎችን የመማር ክህሎት ለማሻሻል የሚረዳ እንደሆነ ይሰማኛል።					
3	ተማሪ-ተኮር የማስተማር ስነ-ዘዴ የተማሪዎችን ብቃት ለመመዘን ያስችለኛል።					
4	ተማሪ-ተኮር የማስተማር ስነ-ዘዴ ከመምህራን-ተኮር የማስተማር ስነ-ዘዴ በተሻለ የተማሪዎችን ተሳትፎ ሊጨምር ይችላል ብዬ አምናለሁ።					

III. ለሚከተሉት ጥያቄዎች ያለዎትን አስተያየት በዕሁፍ ይግለፁ።

1. ተማሪ-ተኮር የማስተማር ስነ-ዘዴ ይጠቀማሉ? መልስዎ አዎን ከሆነ እንዴት? መልስዎ አይደለም ከሆነ የሚጠቀሙት ስልት ምንድን ነው? -----

2. የተማሪ-ተኮር የማስተማር ስነ-ዘዴ አፈፃፀምን በርስዎ ት/ቤት እንዴት ያዩታል? ተግባራዊ ማድረግ ይቻላል? ካልሆነ ለምን?-----

3. በእርስዎ ት/ቤት ተማሪ-ተኮር የማስተማር ስነ-ዘዴን በመተግበር ሂደት ያጋጠመዎትን ችግሮች ቢጠቅሱ።-----

4. ተማሪ-ተኮር የማስተማር ስነ-ዘዴን ተግባራዊ በማድረግ ሂደት የሚያጋጥሙ ችግሮችን ለመፍታት ያስችላሉ ያሏቸውን የመፍትሄ ሃሳቦች ይጥቀሱ።-----

Appendix- G

ክፍል ሁለት: ለመምህራን የሚቀርብ የቡድን ተኮር ውይይት

1. ተማሪ-ተኮር የማስተማር ስነ-ዘዴን እንዴት ትረዱታላችሁ?
2. ተማሪዎችን ብቁ ከማድረግ አንጻር ተማሪ-ተኮር የማስተማር ስነ-ዘዴን እንዴት አገኛችሁት?
3. ራሳችሁን ከወቅቱ የተማሪ ተኮር የማስተማር ስነ ዘዴ ጋር እንዴት ብቁ ታደርጋላችሁ?
4. በት/ቤታችሁ ተማሪ-ተኮር የማስተማር ስነ-ዘዴን ለመተግበር ምቹ ሁኔታ ያለ ይመስላችኋል? በቂ የትምህርት መርጃ መሣሪያዎች አሉን? የሠለጠኑ መምህራንስ? ካልሆነ ብታብራሩ?
5. ተማሪ-ተኮር የማስተማር ስነ-ዘዴ ተግባራዊ ለማድረግ እንቅፋት የሚፈጥሩ ሁኔታዎች ምን ይመስላችኋል?
6. በተማሪ-ተኮር የማስተማር ስነ-ዘዴ ትግበራ ላይ ችግር የሚፈጥሩ ሁኔታዎችን ለመቀነስ አሉ የምትሏቸውን መፍትሄዎች ምንድን ናቸው?

Appendix- H

ክፍል አምስት: ለርዕሰ መምህራን የቀረበ ቃለመጠይቅ

የታ -----

የት/ደረጃ-----

እድሜ -----

የአገልግሎት ዘመን -----

1. በእናንተ ት/ቤት መ/ራን ተማሪ ተኮር የማስተማር ስነ-ዘዴን ይጠቀማሉን?
የተለያዩ ስልቶችንስ ይተገብራሉ?
2. መ/ራን በተማሪ-ተኮር የማስተማር ስነ-ዘዴ ላይ ያላቸው ግንዛቤ እንዲጨምር የምትጠቀሙበት ስልት ምንድን ነው? መ/ራን ይህን የማስተማር ስነ-ዘዴ የተገነዘቡት ይመስልዎታል?
3. ት/ቤቱ ተማሪ ተኮር የማስተማር ስነ-ዘዴን ለመተግበር ምቹ ነውን?
4. የወረዳው ትም/ጽ/ቤት በተማሪ ተኮር ትግበራ ላይ አስፈላጊውን ድጋፍ ያደርጉላችኋልን?
5. በእርስዎ ሐሳብ ተማሪ-ተኮር የማስተማር ስነ ዘዴን ተግባራዊ ለማድረግ እንቅፋት የሚፈጥሩ ሁኔታዎች ምንድን ናቸው?
6. በተማሪ-ተኮር ስነ-ዘዴ ትግበራ ላይ የሚታዩ ችግሮችን ለመቀነስ ሊወሰዱ የሚገባቸው መፍትሔዎች ምን ይመስልዎታል?

Appendix- I

Formulas used to compute mean value and cronbach alpha.

i.
$$\bar{x} = \frac{\sum X_1}{n}$$

Where \bar{X} = mean

Σ = sum of

X_1 = scores in a distribution

n = total number of samples

ii.
$$\alpha = \frac{K}{k-1} \left(1 - \frac{\sum s_i^2}{S_x^2} \right)$$

Where K = total no of items

s_i^2 = variance of scores of the individual items

$\sum s_i^2$ = sum of variances of scores of items

S_x^2 = variance of the sum of the scores of all items.

- ያለው እንዳውቀ (2006). የምርምር መሠረታዊ መርሆዎችና አተገባበር። ባህዳር ዩንቨርሲቲ

Declaration

This thesis is my original work and has not been presented for a degree in any other university and that all sources of my information used for the thesis have been fully acknowledged.

Name Dilnesaw Belay

Signature _____

Date _____

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

Name: Ato Lemma Setegn

Signature _____

Date _____

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