PRACTICES, PERCEPTION AND CHALLENGES OF ACTIVE LEARNING IN PRIMARY SCHOOLS OF MIRAB ABAYA WOREDA GAMO GOFA ZONE

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AUTHORS' CONTRIBUTIONS

This work was carried out in collaboration between both authors. Author FG designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author CA managed the analyses of the study and managed the literature searches. Both authors read and approved the final manuscript.

Original Research Article

ABSTRACT

The purpose of this study was to assess the practice, perception and the challenges of active learning in Mirab abaya woreda Gamo Gofa zone. To realize these purposes three basic questions were formulated. To address these questions the descriptive survey method was employed. In this study the primary source of data were teachers, school principals, supervisors and students of the selected schools. The questionnaires were distributed to 92 students, 47 teachers, and interviews were made with 6 directors and 3 cluster supervisors drawn from 6 schools. The sampling method used to select teachers and students was simple random sampling and directors and supervisors were selected using purposive sampling. The Data collection tools are questionnaires, semi structured interview and observation. The data obtained through questionnaires were quantitatively analyzed and interpreted in light of available literature, whereas the information obtained through interview and observation were qualitatively described to supplement the quantitative data. To analyze data descriptive statistics like percentage, mean, and standard deviations was used. Moreover, independent t-test and one way ANOVA was used. Based on the data analysis the following major findings were obtained. The study revealed that the majority of teachers have good understanding of active learning but they has problem in the implementation process, There is inbuilt supervision in schools to monitor and follow instructional process, There is lack of training about active learning method for teachers to update their knowledge and skill, Teachers are teaching students in traditional (teacher centred) method of teaching rather than student centre, There is no effective implementation of active learning across schools. Concerning the factors tendency of teachers to use teacher centered approach, tendency of students to be passive receiver of knowledge, shortage of time, workload, and large class size was also found to be as the major problem that affecting the implementation of active learning. Based on these findings, it was safely concluded that the implementation of active learning in selected schools has their own limitation that need improvement. Finally, it was recommended that teachers should show their commitment and put theoretical knowledge into practice, Supervisors and school directors in collaboration with Woreda education office should facilitate different short term training on active learning.

Keywords: Practice; perception; active learning; challenge.

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1. INTRODUCTION

Active learning is an instructional approach in which students influence the content, activities, materials and pace of learning. This learning model places the student on the centre of the learning process. It provides students with an opportunity to interact each other not only understand educational concepts presented by the teacher, but also build social interaction skills that will be vital for their futures.

There are some constraints which can impede the proper implementation of active learning. Some of these factors are connected in the midst of the pressure of the syllabus, improper classroom organization and management, lack of trained teachers, school directors and problem with the students, attitude of teachers, etc [1].

In line with the above idea some local studies were conducted in relation to the practice of active learning in some government primary and secondary schools. Among these one is the study conducted on" The status of active learning practice: the case of some selected first cycle secondary schools of East Shoa Zone". His major findings show that large class size, the majority of teachers use traditional (teacher centered) method, shortage of time and lack of resources, students lacks interest in practicing active learning, shortage of training to teachers concerning active learning are the main factors that impede the effectiveness of active learning [2].

In our country, different research findings on the implementation of a student - centered approach of instruction revealed that teachers are very weak in using the approache. For instance, research show that teachers in Ethiopia were weak at practical teaching using student-centred learning methods [3].

"The long standing problems associated with the Ethiopian education system were essentially limited and inequitable access, lack of quality and relevance, and continuous decline in the quality and standard" [4]. The main goal of education is equipping students with good knowledge, skill, understanding and bringing permanent behavioral change to do this selection and usage of appropriate instructional method is the determinant factor.

In addition, another researcher conducted on'' Assessment of implementation of active learning in Combined Army Academy". The study reported that lecture method and group work are mostly utilized method, shortage time, Inadequacy of instructors' training on the application of active learning strategy of instructional materials, lack methods and lack of

awareness on what active learning are the major factors that affect the implementation of active learning and encouraging learning by doing, involving students in learning, taking responsibility for one's own learning are some of the practices that promote active learning strategies [5].

Consequently, efforts are being made at school and regional levels to organize short-term trainings and encourage teachers to use student centered approach in the teaching learning process. Cluster resource centers are set up for teachers in schools with close catchment areas to share experiences and to jointly organize short term training that helps teachers replace the old-teacher centered approach to student-centered approach [4].

Correspondingly, the primary schools found in Mirab abaya Woreda Gamo Gofa zone are also have been implementing active learning strategies to realize the national educational objectives and produce effective students. However, from experience and the researcher's personal observations, it is understood that teachers and students seem lack the basic techniques in implementing active learning and so it need further investigation to know the gap and strength.

2. BASIC RESEARCH QUESTIONS

This study is designed to assess the practice, perception and challenges of the implementation of active learning, the factors that hinder or facilitate the practice and mechanisms to improve the current practices of active learning. In line with this, in order to assess the issues systematically the following research questions are formulated.

Generally, this study is expected to answer the following basic questions:

1. To what extent active learning is implemented in Mirab Abaya schools?
2. What are the challenges that affect the implementation of active learning?
3. What measures have been taken to improve the implementation of active learning?

3. REVIEW OF THE RELATED LITERATURE

3.1 Theoretical Framework: Learning Theories

Behavioral theory of learning: The common assumptions of these theorists are threefold, the first

common assumption is the emphasis on observable behaviour rather than internal thought processes that create learning. Second, ultimately it is the environment that creates learning and it determines what is learned, not the individual student/learner. Lastly, it is the student's ability to understand the overall process, and the ability to repeat or reinforce that process that is a common thread [6].

Behavioural theory explains learning in terms of observable phenomena and ignores thoughts and feelings of students. According to behaviourists, learning occurs as a 'response' to certain definite and identifiable stimuli in one's environment. Since it is not possible to observe what is happening inside a student/learner's brain, they advocate that measuring and theorizing about learning must be limited to merely the stimulus and the response.

Cognitive theory of learning: To the behaviourist theory of learning. The current cognitive view of learning has its antecedents in Gestalt theory (which emphasized learning through insight) and the work of Piaget [7]. Gestalt theory, which is otherwise known as purposive behaviourism, is the most important cognitive theory relevant to the training. The gestalt psychologists explain that learning is neither a matter of adding new traces nor subtracting old ones, but of changing one gestalt into another. They view learning as a purposive, exploratory, imaginative and creative process of developing new insights or modifying old ones [8].

Social learning theory: Social learning theory falls a category of learning theories which are grounded in the belief that human behaviour is determined by a three-way relationship between cognitive factors, environmental influences and behaviour [9]. Furthermore, social learning theory points out that the individual learns from the behaviour of others through observation, imitation and modeling.

Constructivist theory of learning: The term refers to the idea that learners construct knowledge for themselves---each learner individually (and socially) constructs meaning as he or she learns.

Constructivism is viewed as a meaning–making theory that offers an explanation of the nature of knowledge and how human beings learn. Knowledge, as viewed here, is acquired through an involvement with content rather than imitation or repetition. According to this explanation of learning, "individuals create or construct their own new understandings or knowledge through the interaction

of what they already know and believe and the ideas, events, and activities with which they come in contact" [10].

Constructivists believe that all humans have the ability to construct knowledge in their own minds through a process of discovery and problem solving. The extent to which this process can take place naturally without structure and teaching is the defining factor amongst those who advocate this learning theory.

3.2 Types of Instructional Approach

Teacher- Centered Approach: Teacher centre approach gives the priority role and responsibility to the teacher. The teacher is considered as the center of classroom activity, and is thought to hold most of the knowledge necessary for the students to be successful [11].

Teacher- centered approach as follows "Teacher-centered instruction refers to academically focused, teacher- directed classroom using sequenced and structured materials". It refers to teaching activities where goals are clear to students, time allocated for instruction is sufficient and continuous, coverage of content is extensive, the performance of students is monitored, and feedback to the student is immediate and academically oriented. Moreover, the teacher plays a primary role in structuring content, explaining it, and using examples to increase students" understanding [12].

Student-centered (Active Learning Approach): Active learning where students are active participants in their own learning rather than passive receivers of knowledge and where students engage in some activity that forces them to think about and comment on the information presented. The focus of active-learning is on generating knowledge through a process of inquiry, observation, analysis and problem solving.

Active learning is defined as learning in which the child, by acting on objects and interacting with people, ideas, and events, constructs a new understanding and also refers to techniques where students do more than simply listen to a lecture, Students are doing something including discovering, processing and applying information [13].

Principles of Active Learning: Seven principles for good practice of active learning in undergraduate education: (1) Encourage contacts between students and teachers (2) Develop reciprocity and cooperation

among students (3) Use active learning techniques (4) Give prompt feedback (5) Emphasize time on task (6) Communicate high expectations and (7) Respect diverse talents and ways of learning [14].

3.3 Factors Affecting the Implementation of Active Learning

Teachers and students" attitude of active learning: Teachers" and students" attitude of active learning largely depend on the knowledge they adhere. This means that teachers and students who strongly support the traditional method of teaching assume that the teacher is the only source of knowledge and knows best. To such teachers and students teaching takes a predominant role over learning. Indeed students are assumed "empty vessels" to be filled by the teacher. The authors further write "due to their perceptions many teachers and students tend to avoid active learning." [15].

Class size: It is not suitable to provide different experiments and group works having many students in overcrowded classroom. Schools in many parts of Africa are composed of a large number of students [1]. Thus giving students enough attention and meeting the need of every student so as to engage actively in the learning process is difficult and teachers who teach many students in overcrowded classroom often say that it is certainly not suitable to provide activities and group works for such classes.

The physical environment: Besides social environment of a given institution, the location, size, shape and construction of the classroom, the presence and effective management of different instructional facilities like: Furniture, resource center, laboratory and library services have direct bearing on the instructional methods. A number of schools confirmed that the physical environment (classroom arrangement, furniture arrangement, classroom appearance and layout, etc.) contributes a lot to promote active learning. A clean and well-kept room with appropriate resources and well aired room help to establish a positive contribution to implement active learning [16].

The design of the teaching text book: Preparations of the textbooks were not appropriate for the implementation of active learning. They only serve one-way instruction. In one way communication with the learner reads what has been written but no way responds to the material. This greatly reduces the creativity of the learners and the implementation of active learning [1].

3.4 Methods of Implementing Active Learning

Jigsaw Method: In this method the teacher divides the class into groups. Letter name is assigned to each member. Each group is given a "specialist" topic and each member of that group has to become an expert in that topic. After they have become an expert, you separate the "specialist" groups and form new groups. The new groups are made up of one specialist from each of the original groups. They then work together to teach each other the information they learned in their original group.

Role- Playing: During role-playing a small number of students present the content while others in the class observe. Students have the opportunity, to experience and analyze the specific situation being studied [17].

Group Discussion: Discussion in the classroom is an important kind of active learning strategy. This strategy gives room for the students to exchange, explore and air their views [18].

Brain storming: This is when the students generate as many ideas as possible about a topic-an ideal storm! It can be a great way to start a class on any given topic.

Peer-Teaching: Peer-teaching is also an appropriate strategy to be applied in a teacher training program. It can solve the problem of large class size and it may release teacher educators" time for personal research or for producing resource based learning material [19].

Educational Visit /Field Trip Method: Field trip is a planned visit to places outside the regular classroom to obtain information directly and study real situations. The visit can be used to develop critical thinking and broaden the horizons of the learners as they see different things and activities.

Group Work: Group work is part of collaborative strategy of teaching learning. It is one of the best ways of encouraging active learning by arranging the learners" work together in a group.

Demonstration: A demonstration activity is when the instructors demonstrate how to do something in front of their class. The purpose of doing a demonstration is to show the students how doing something in both words and actions.

The Role and Responsibilities Teachers: A student-centered learning environment is one where, as teachers, we recognize our role as facilitators of learning and not just repositories of knowledge. We

accept that we are not the sole authority on any subject matter. Our teaching approach moves away from conveying information towards facilitating students' personal discovery through discussion, consultation, and mentoring.

The Role and Responsibilities of the Students: In a learner-centered classroom, the principle is that ownership of learning should be given over to the learners themselves unlike the teacher-centered classroom practices. The teacher acts as a facilitator and a resource person during a learner-centered teaching learning process. "learning is self-initiated, and often involves the process of inquiry and discovery; the learner is also responsible for evaluating the results" [20].

4. RESEARCH DESIGN AND METHODOLOGY

4.1 Research Design

In this study a mixed methods approach was followed. The major purpose of this research is assessing the practice, perception and challenges of active learning in Mirab Abaya second cycle primary schools, to achieve this purpose descriptive survey method was employed this method is more effective to investigate the phenomena in assessing the implementation of active learning approach in their natural setting. A descriptive survey design helps in picturing the existing situation. Additionally, it allows gathering of necessary information using data collecting instruments and document analysis.

4.2 The Source of Data

The data was collected from various sources; this study was conducted in Mirab Abaya second cycle primary schools (grades 7 and 8). The data sources were teachers, students, school principals and a supervisor were used as a source of data.

4.3 Sample and Sampling Techniques

The study was conducted in Mirab Abya government second cycle primary schools because the researcher believed that there is a gap that needs to be assessed about the current practices of active learning within schools. The population of this study was cover 26 Government second cycle primary schools Schools which are found in Mirab Abaya Woreda. But to make it specific and manageable, the researcher considered six government second cycle primary schools, by using simple random sampling. After

selecting the sample schools, teachers, students, school principals and supervisors were identified. The sampling method used in the study was both purposive and simple random sampling methods. In the process of selecting participants for this study, the simple random sampling technique was employed to select teachers and students and purposive sampling technique was employed for qualitative part of the study, to select supervisors and school directors. Accordingly 3 supervisors and 6 school principals were interviewed.

4.4 Tools for Data Collection

In order to collect qualitative and quantitative data, from the primary sources, different instruments were employed. To this end, questionnaire, interview and classroom observation was used as an instrument for data collection.

4.5 Method of Data Analysis

The methods used for analyzing the data was depended up on the instruments employed. The data gathered through questionnaire were analyzed through quantitatively using percentages and mean value. Whereas, data gathered through qualitative approaches were analyzed through narration concurrently to cross check the quantitative data. The data collected from teachers, students, and administrators through questionnaire was processed and analyzed using Statistical Package for Social Science (SPSS) version 23. Descriptive statistics like percentage, mean, and standard deviations was used to analyze teachers and students practice and knowledge of active learning and the challenges of active learning. Moreover, independent t-test was used to find if there was a mean difference in factors affecting implementation of active learning and one way ANOVA was used to examine differences in knowledge of active learning methods across sex, teaching experience and educational qualification.

5. RESULTS AND DISCUSSION

This section deals with presentation, analysis and interpretation of data obtained from teachers, students, school principals, and supervisors. The study employed questionnaires for teachers and students, structured interview for school directors and school supervisors. Thus, the quantitative as well as qualitative analysis of data was incorporated into this chapter. The qualitative part was supposed to be complementary to the quantitative analysis.

Table 1. Back ground information of teachers

Variable	Category	Frequency	Percent
Sex	M	31	66
	F	16	34
	Total	47	100
Age	20-25	1	2.1
	26-30	18	38.3
	31-40	20	42.6
	Above 41	8	17
Educational Qualification	Certificate	0	0
	Diploma	28	59.6
	BA	19	40.4
	1-10	20	42.6
Teaching Experience	11-15	18	38.3
	16-20	0	0
	Above 21	9	19.1

6. ANALYSIS OF THE MAIN DATA

6.1 Knowledge, Implementation, Practice and Challenges of Teachers on Active Learning

All the questions appeared in the questionnaire are organized into four major Categories namely knowledge, implementation or practice and challenges about active learning based on the information obtained from respondents The following data has been recorded and analyzed.

Knowledge and Perception of Teachers on Active learning: Teachers' knowledge, attitude towards active learning can play a facilitating role for success of implementation of active learning approaches. Unless the teachers positively perceive the instructional methods used in the classroom, their interest and their activities may affect the successful

Table 2. Back ground information of students

Variable	Category	Frequency	Percent
Sex	M	52	56.5
	F	40	43.5
	Total	92	100
Age	11-15	67	72.8
	16-19	23	25
	20-25	2	2.17
	Total	92	100
Grade level	7	48	52.17
	8	44	47.82

Table 3. Back ground information of school directors

Variable	Category	Frequency	Percent
Sex	M	6	100
	F	-	-
Age	25-30	1	16.6
	31-35	4	66.6
	35-40	1	16.6
	Above 40	-	-
Educational Qualification	Diploma	-	-
	BA	6	100
	MA	-	-
Experience as school director	1-10	2	33.4
	11-20	4	66.6
	21-30	-	-
	Above 41	-	-

Table 4. Back ground information of school supervisors

Variable	Category	Frequency	Percent
Sex	M	3	100
	F	-	-
Age	25-30	-	-
	31-35	2	66.6
	35-40	1	33.3
	Above 40	-	-
Educational Qualification	Diploma	-	-
	BA	3	100
	MA	-	-
Experience	1-10	1	33.3
	11-20	2	66.6
	21-30	-	-
	Above 41	-	-

Table 5. The summary of data obtained from teacher respondents

Items	Strongly agree		Agree		Disagree		Strongly disagree		Undecided		Mean
	F	%	F	%	F	%	F	%	F	%	
Teachers have good knowledge and skill about active learning	20	42.6	19	40.4	2	4.3	-	-	6	12.8	4.2
The school and woreda education office facilitate in service workshops and training on active learning	6	12.8	10	21.3	9	19.2	17	36.2	5	10.2	2.5
Active learning contributes to better achievement of students than teacher centered teaching	20	42.6	16	34.0	5	10.6	1	2.1	5	10.6	4.04
Active learning is intellectually more stimulating	21	44.7	20	42.6	-	-	-	-	6	12.8	4.3
Active learning pave the way for students to construct knowledge	18	38.3	20	42.6	3	6.4	1	2.1	5	10.6	4.1
I know that active learning adds work load on teachers and require a lot of time	12	25.5	18	38.3	8	17.0	2	4.3	7	14.9	3.7
I have a limitation of awareness of active learning strategies	17	36.2	20	42.6	2	4.3	1	2.1	6	12.8	4.9
The implementation of active learning requires active participation of students	31	66	11	23.4	1	2.1	-	-	4	8.5	4.5
In using active learning, teachers find it difficult to cover the prescribed syllabus	9	19.1	21	44.7	4	8.5	1	2.1	12	25.5	3.7
Active learning involves a democratic relationship between the teacher and the student	24	51.1	16	34.0	1	2.1	-	-	6	12.8	4.3

learning achievement. Therefore, active learning approach of learning can be affected by knowledge and perception on the implementation.

For the information obtained about teacher's knowledge and perception of active learning methods Likert scale was used. Scoring was done by assigning values of 5, 4, 3, 2, & 1 for the strongly agree, agree, disagree , strongly disagree and undecided responses respectively, for statements written in such a way that agreement meant mean of above 3.5 refers favourable condition and below 3.5 refers unfavourable condition.

The summary of data obtained from teacher respondents to the questions asked about their about

knowledge and perception of active learning in the selected schools.

6.2 Supplementary Interview Response Analysis of school Directors and Supervisors

Regarding teachers knowledge and skill about active learning school directors and supervisors forwarded that teachers has knowledge about active learning methods because all teachers had taken course about active learning in their college but in the implementation there is great limitation. This refers that teachers have awareness about active learning but there is limitation in practice it may arise from different factors for instance teacher's interest and commitment, work load and lack of students participation.

Concerning providing school based training about active learning methods to teachers they responded that they did not give any training on active learning for teachers and also there is monitoring activities regarding active learning through in built supervision and also the issue of active learning it does not incorporated in school continuous professional development priorities.

From the above response about teacher's knowledge and perception about active learning the researcher concluded that majority of teachers has knowledge about active learning but they have limitation in practicality this may because of lack of training to update teachers knowledge and skill about different methods of active learning strategies and also they believe the great contribution of active leaning for academic, social and personal development of students and make positive relation among students themselves and also with teachers and , active learning is more stimulating and make students to construct their own knowledge by using their own prior experience to do so it need active participation of students. There is perception among teachers taking active learning as additional work load on teachers and also they feel difficult to cover teaching material by applying active learning this may due to unfamiliarity of teaches in implementing different strategies.

Meanwhile, an attempt was made to know whether there is knowledge difference among students across sex exists. As indicated in the table above, there is no statistically significant association between sex of teachers and their knowledge of active learning ($p < 0.05$ level across sex ($F (1, 45) = .1.948$, $p=0.170$).

Table 6. One way ANOVA summary of teachers' knowledge towards active learning across sex

Descriptive

	N	Mean	Std. deviation	Std. error
Male	31	3.9323	.56885	.10217
Female	16	4.2688	1.09223	.27306
Total	47	4.0468	.79122	.11541

	Sum of squares	Df	Mean square	F	Sig.
Between Groups	1.195	1	1.195	1.948	.170
Within Groups	27.602	45	.613		
Total	28.797	46			

Table 7. One way ANOVA summary of teachers' knowledge towards active learning across educational level

Descriptive

	N	Mean	Std. deviation	Std. error
Diploma	28	3.9571	.56858	.10745
Degree	19	4.1789	1.04114	.23885
Total	47	4.0468	.79122	.11541

ANOVA

	Sum of squares	Df	Mean square	F	Sig.
Between Groups	.557	1	.557	.887	.351
Within Groups	28.240	45	.628		
Total	28.797	46			

In the meantime an attempt was made to know whether there is knowledge difference among students across sex exists. As indicated in the table above, there is no statistically significant association between educational qualification of teachers and their knowledge of active learning (p< 0.05 level across educational qualification (F (1, 45) =.887, p=.351).

For the time being, an effort was made to know whether knowledge difference among students across sex exists. As indicated in the table above, there is no statistically significant association between teaching experience of teachers and their knowledge of active learning (p< 0.05 l teaching experience (F (2, 44) =1.069, p=.352).

Based upon the above response of respondents the researcher concluded that students has awareness and good perception about active learning and it has a potential to contribute for their academic achievement and also they understand and master well the learning materials when teachers give opportunity and they participate actively in the learning process rather than only attending the lecture and presentation of teachers. Teachers give feedback and encourage students to be active in their learning.

There is a limitation in the side of teachers in using different active learning strategies to involve students in teaching learning process and to provide opportunities to construct their own knowledge, to develop problem solving abilities and also there is limitation in supporting and rounding each group of students when they are doing their activities in group and pair.

Table 8. One way ANOVA summary of teachers' knowledge towards active learning across teaching experience

	N	Mean	Std. deviation	Std. error
1-10	20	4.2300	1.09645	.24517
10-15	18	3.8556	.40471	.09539
above 21	9	4.0222	.47900	.15967
Total	47	4.0468	.79122	.11541

ANOVA					
	Sum of squares	Df	Mean square	F	Sig.
Between Groups	1.335	2	.668	1.069	.352
Within Groups	27.462	44	.624		
Total	28.797	46			

Table 9. Students knowledge and perception on active learning

No	Items	Yes		No	
		F	%	F	%
1	Students have good knowledge and skill in the implementation of active learning	82	89.13	10	10.86
2	Do you like to participate actively rather than attending teacher lecture?	82	89.13	10	10.86
3	Do you believe active learning contributes to better academic achievement?	78	84.7	14	15.2
4	Do you learn more efficiently and effectively in active learning classes than lecturing classes	58	63.04	34	38.06
5	I master the learning material in a better way in active learning classes than lecture classes	55	59.7	38	41.3
6	When teachers give activities to be done in groups/pair they go round each group and help students	35	38.04	57	61.9
7	Active learning method creates a heavy load on the part of the student, and it is difficult to practice	66	71.7	26	28.26
8	Teachers provide feedback on time for learning tasks	73	79.3	19	20.6
9	Do your teachers regularly motivate you to practice different activities in the classroom regardless of your mistakes that can be improved through practice	65	70.65	27	29.3
10	Do Teachers use active learning methods in their teaching learning classrooms	30	32.6	62	67.4

Based up on the above response it is possible to conclude that teachers has interest to use different types of active teaching strategies and to some extent teachers use different types active learning methods in their instruction and also there is an attempt to give time and encouraging students to express their own view towards different in the teaching learning process but there is limitation on the side of students to participate actively, to contribute their own effort in the learning process and majority of teachers teach students through teacher centered method and also there is problem in giving support while students are doing activities in group and pair this may obstacle in the implementation process.

6.3 Supplementary Interview Response Analysis of school Directors and Supervisors

On the topic of types of active learning methods that are usually practiced in their school they forwarded that most of the time teachers use group work, questioning and sometimes presentation, this response supports the data gathered through questionnaires.

From the response of teachers about the practice of active leaning strategies the researcher concluded that small group discussion, questioning, group work, pair discussion were frequently used by teachers in the instructional process and the rest ones are not used by teachers frequently and also majority of teachers has no clear awareness about cross over methods, this indicate that most teachers has limitation of awareness and practice in some types of active instructional methods this condition may one of the challenge to implement active learning methods effectively.

6.4 Challenges of Active Learning

Concerning the challenges of active learning different factors are considered as challenge some are associated with teacher, student, time and also classroom environment.

6.5 Supplementary Interview Response Analysis of school Directors and Supervisors

Concerning the major challenges that impede the implementation of active learning strategies in schools they forwarded the following points as a major challenge.

- ❖ Teachers' perception of active learning
- ❖ Teachers' commitment for its practicality

- ❖ Low student's participation
- ❖ Time constraints
- ❖ Students learning tradition and expectation
- ❖ Lack of understanding how to implement.

For the above factor they suggest the following possible solutions to alleviate these challenges, they forwarded teachers should get training to update their knowledge on active learning, incorporating active learning in continuous professional plan to assess the practice and providing ongoing support and monitoring.

From the above response of respondent teachers and students the researcher concluded that the implementation of active learning strategy was seriously affected by various factors, from the factors that affect the practice of active learning as clearly indicate in the table the serious ones are teachers tendency to use traditional or teacher centred method, shortage of time to implement and to involve and guide each student or group, few students domination when the teacher order to do in group, absence of training on active learning and work load and also the rest are also affecting the implementation of active learning. In line with this study on the perception and practice of teachers of active teaching methodologies of teachers of college of education and behavioral sciences in Haramaya University_ Ethiopia found out Among the major factors affecting the effective implementation of active learning were instructors' tendency toward the traditional/lecture method, lack of students' interest, shortage of time, lack of instructional material and large class size [21].

Furthermore, as presented in the table below, independent t-test was computed to find if there were mean differences in factors that affecting implementation of active learning within teachers and students. Accordingly, the independent t-test result in the above table also provides the difference (-5.002) between the sample and population means and the 95% Confidence Interval. The difference between the sample and the population mean is likely to be between -64.707 and -352 points. Thus, the difference is statistically significant, there was a statistically significant difference in challenges of implementation of active learning methods ($t (137) = -6.72$, $\alpha < 0.001$).

6.6 Presentation and Analysis of Data Obtained through Observation

The summary of data obtained through classroom observation about implementation of active learning in the selected schools. The summary has been summarized in Tables 14-17.

Table 10. Teachers' response regarding on their implementation of active learning

Factors	Strongly agree		Agree		Disagree		Strongly disagree		Undecided		Mean	Std. deviation
	F	%	F	%	F	%	F	%	F	%		
Teachers use different instructional methods to implement active learning	15	31.9	21	44.7	9	19.1	-	-	2	4.3	3.89	1.06
Teachers give time to students to express their own view on the topic	16	34.0	27	57.4	2	4.3	1	2.1	-	-	4.1	.84
Teaching learning activities is teacher centred rather than student centred	16	34	22	46.8	7	14.9	-	-	2	4.3	4.8	6.06
There is active participation of students in the implementation of active learning	3	6.4	7	14.9	20	42.6	12	25.5	5	10.6	2.3	1.2
Teachers use different activities to involve students in the instruction	15	31.9	22	46.8	5	10.6	1	2.1	4	8.5	3.9	1.02
Teachers encourage students to participate actively in the teaching learning process	20	42.6	23	48.9	1	2.1	1	2.1	2	4.3	4.27	.826
Teachers has good interest to implement active learning	9	19.1	20	42.6	10	21.3	1	2.1	7	14.9	4.1	.79
There is effective implementation of active learning in our school	4	8.5	12	25.5	21	44.7	1	2.1	9	19.1	2.9	1.07
In classroom activities teachers go round each group to give guidance	9	19.1	20	42.6	10	21.3	1	2.1	7	14.9	3.5	1.09

Table 11. Teachers' responses regarding their using of Active learning methods

No	Methods	Always		Frequently		Sometimes		Rarely		Not at all		Not clear with strategies		Mean
		F	%	F	%	F	%	F	%	F	%	F	%	
1	Demonstration method	3	6.4	8	17	18	38.3	17	36.2	1	2.1	-	-	2.8
2	Debating method	-	-	7	14.9	14	29.8	20	42.6	5	10.6	-	-	3.1
3	Small group Discussion	15	31.9	22	46.8	8	17.0	2	4.3	-	-	-	-	4.06
4	Crossover method	1	2.1	5	10.6	8	17	15	31.9	9	19.1	9	19.1	1.3
5	The Questioning Method	16	34	19	40.4	7	14.9	4	8.5	1	2.1	-	-	3.9
6	Dramatization:	-	-	5	10.6	7	14.9	29	61.7	6	12.8	-	-	2.23
7	Group Learning	20	42.6	18	38.3	7	14.9	2	4.3	-	-	-	-	4.1
8	Interview method	1	2.1	10	21.3	12	25.5	15	31.9	7	14.9	2	4.3	1.17
9	Microteaching method	2	4.3	9	19.1	13	27.7	10	21.3	10	21.3	3	6.4	2.4
10	Pair Discussion method	3	6.4	12	25.5	17	36.2	11	23.4	2	4.3	-	-	3.7
11	Peer Assessment method	5	10.6	11	23.4	21	44.7	9	19.1	1	2.1	-	-	3.2
12	Presentation method	4	8.5	19	40.4	16	34	8	17	-	-	-	-	3.4

Table 12. Frequency, percentage and mean values of factors affecting implementation of active learning

No	Factors affecting the implementation of active learning		1=Not serious		2=Undecided		3=Serious		4=Most serious		Mean
			F	%	F	%	F	%	F	%	
1	Teachers' tendency to use traditional method	TE	-	-	2	4.3	25	53.2	20	42.6	3.38
		ST	6	4.3	48	34	29	20.6	9	6.4	2.4
2	Most teachers does not prepare activities for students	TE	14	29.8	4	8.5	16	34.0	13	27.7	2.5
		ST	18	12.8	27	19.1	34	24.1	13	9.2	2.45
3	Shortage of time to practice active learning in classroom	TE	3	6.4	5	10.6	22	46.8	17	36.2	3.1
		ST	17	12.1	29	20.6	31	22	15	10.6	2.47
4	Lack of students motivation (passive participation of students	TE	3	6.4	2	4.3	22	46.8	20	42.6	3.2
		ST	6	4.3	37	26.2	33	23.4	16	11.3	2.6
5	The tendency of students to be passive recipients of knowledge	TE	7	14.9	3	6.4	22	46.8	15	31.9	2.9
		ST	6	4.3	27	19.1	31	22	28	19.9	2.88
6	Large class size	TE	4	8.5	4	8.5	19	40.4	20	42.6	3.1
		ST	4	2.8	29	20.6	34	24.1	25	17.7	2.86
7	Work load	TE	15	31.9	22	46.8	8	17	22	4.3	3
		ST	27	19.1	31	22	14	9.9	20	14.2	2.57
8	Lack of teachers commitment	TE	6	12.9	2	4.3	26	55.3	13	27.7	2.9
		ST	21	14.9	30	21.3	22	15.6	19	13.5	2.4
9	Lack of refreshment training on active teaching and learning strategies	TE	-	-	4	8.5	17	36.2	26	55.3	3.4
		ST	6	4.3	22	15.6	38	27	26	18.4	2.9
10	Some students domination during group activities	TE	2	4.3	3	6.4	13	27.7	29	61.7	3.4
		ST	6	4.3	28	19.9	36	25.5	22	15.6	2.8

Table 13. Independent t-test for difference of means challenges of active learning

	Independent samples test						
	T	Df	Sig. (2-tailed)	Mean difference	Std. error difference	95% confidence interval of the difference	
						Lower	Upper
Challenge mean	-6.724	137	.000	-.50002	.07436	-.64707	-.35297

Table 14. Presentation and analysis of data obtained through observation

No			Yes		No	
1	**Classroom Condition**					
		F	%	F	%	
1.1	Classroom arrangement can maximize active learning?	4	33.3	8	66.6	
1.2	Is the classroom layout arranged to facilitate active learning?	3	25	9	75	
1.3	Is the class size appropriate?	2	16.7	10	83.3	
1.4	Is there group work activity?	4	33.3	8	66.6	
1.5	Is there enough sitting space for all students?	3	25	9	75	

Table 15. Frequency and percentage values of classroom observation of teachers activity

No 2	Teachers' activity	Yes		No	
		F	**%**	**F**	**%**
2.1	Use a variety of effective instructional strategies and resources	2	16.7	10	83.3
2.2	Giving direction about the procedures and activities	2	16.6	10	83.3
2.3	Encouraging students to become active participants	5	41.6	7	58.3
2.4	The Teacher is more active than the students	9	75	3	25
2.5	Managing the class for active learning implementation	2	16.7	10	83.3

Table 16. Frequency and percentage values of class room observation of students activity

No 3	Students activity	Yes		No	
		F	**%**	**F**	**%**
3.1	Students are participating in problem solving activities	3	25	9	75
3.2	Students are playing roles	2	16.	10	83.3
3.3	Students are discussing issues in groups	6	50	6	50
3.4	Students are taking part in peer teaching	0	-	12	100
3.5	Students are listing passively during the lesson	9	75	3	25

Table 17. Frequency and percentage values of classroom observation of evaluation

4	Evaluation	Yes		No	
		F	**%**	**F**	**%**
4.1	The teacher follows up students" participation and activities	4	33.3	8	66.4
4.2	Teacher elicits responses from learners instead of supplying answers	7	58.3	5	42.7
4.3	The teacher evaluates students group cooperation	5	42.7	7	58.3
4.4	Teacher checks and gives constructive feedback to the students work	6	50	6	50
4.5	Use variety of assessment strategies	4	33.3	8	66.4

7. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 Summary of Findings on the Level of Knowledge, Perception and Practice of Active Learning

The analysis of data about knowledge of teachers and students about active learning is not fully satisfactory it is moderate as the response of teachers and students confirmed that the following findings show some of the gap and strong sides concerning knowledge of active learning.

- Teachers and students has an understanding about active learning, but they have defects during classroom practice and also there is inbuilt supervision in schools to monitor and follow instructional process
- Teachers and students has strongly believe that teaching and learning through active instructional method highly contribute to the academic achievement of students but there is a lack of training about active learning method for teachers to update their knowledge and skills
- There is no active participation of students in the instructional processes it may hinder the effective implementation of active learning. Teachers are teaching students in traditional (teacher centered) method of teaching rather than student cantered

7.2 Factors that affect Implementation of Active Learning

Concerning factors that affected the implementation of active learning, the analysis of data also discovered the following findings

- The tendency of teachers to use teacher centered method greatly affected the implementation of active learning in their classrooms.
- lack of interest to participate in active learning and the tendency of students to be passive receiver of knowledge

- Shortage of time, workload, and large class size was also found to be as the major problem in affecting the implementation of active learning.

In addition, the observation result indicates that limitation in using a variety of effective instructional strategies the classroom seating arrangements were not conducive and flexible to facilitate active learning. Moreover, the physical environments of the classroom did not reflect the required qualities for active learning practices.

Based on the analysis and summary of the major findings, the following conclusions were made:

It is clear that the effectiveness active learning largely depends on the extent to which teachers are equipped with the necessary skill and knowledge and utilize active learning strategies, but the finding of the study revealed that both teachers and students have theoretical knowledge and skills about the importance of active learning methods but they have defects during classroom practices and also no attempt was made by school directors, supervisors and woreda education office to give refreshment training this condition affects teachers to update their knowledge and to implement active learning effectively. There is inbuilt supervision in schools in schools to monitor the instructionl process, this is important for teachers to solve problems and mistakes related to the instruction and also it is a means to monitor whether they use active learning or not.

Majority of teachers and students have good perception about the contribution of active learning in enhancing academic achievement of students to do this it need the active participation and commitment of both students and teachers unless students and teachers are actively participate and committee for practicality it is difficult to implement effectively, There is no active participation of students in the instructional processes it may hinder the effective implementation of active learning.

Teachers are teaching students in traditional (teacher centered) method of teaching rather than student center, teachers were not using different form of active learning strategies like dramatization, problem solving, crossover, demonstration. Rather the teacher-centered, lecture methods applied most of the time. The commonly used from the student-centered strategy was a group discussion and questioning method.

The implementation of active learning methods in primary schools was challenged by teacher and students related factors such as the tendency of teachers to use teacher centered method, students' lack of interest to participate in active learning and the tendency of students to be passive receiver of knowledge greatly affected the implementation of active learning in their classrooms, lack of students motivation and waiting teachers for each activity, shortage of time, workload, and large class size are the main factors that affect the implementation of active learning.

7.3 Recommendation

Based on the findings of the study, the researcher would like to forward the following recommendations for the improvement of the practices of active learning.

In order to make the instructional process more active teachers should show their commitment and put theoretical knowledge into practice.

Supervisors and school directors in collaboration with woreda education office should facilitate different short term training on active learning and related issues to overcome their limitations.

The research findings revealed that class size was one of the major factors which hindered the implementation of active learning methods. In order to minimize and possibly to avoid the large class size and sitting arrangement problems, the stakeholders need to give attention to construct additional classrooms and make the existing classrooms conducive to the implementation of active learning methods through school interactive and collaborative leadership role.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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