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The Practice and Challenges to Implement Active Learning Methods in North Wollo Woldia Town Governmental Primary Schools

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Abstract

The focus of this study was to investigate the practice and challenges to implement active learning methods in Woldia Town Governmental primary Schools. The data were collected through questionnaire, observation and interview from the respondents and analyzed in percentages, graphs and tables. The analysis of the data indicates that almost all of the subjects of the study have perceived active learning positively. However, there is a difference in perception of utilization of active learning by the old curricular trained teachers and the newly curricular trained teachers. The identified chief factors which influence the practice of active learning are students' lack of interest, teachers and students prefer lecture method instead of active learning, lack of teaching material, shortage of time, lack of continuous and/sustainable training and Classroom management. Apart from the above mentioned major factors, the other one is some teachers were assigned to teach subjects outside from the area of specialization. Accordingly, the practices of active learning in the primary government schools were found to be low.

Keywords: Active Learning; Factors; Practice; Methods of Teaching.

1. Introduction

Active learning provides opportunity for students in the classroom to talk and listen, write, read, and reflect their ideas, issues, [1]. Active learning strategies are more important in learning over traditional or passive learning [2]. Active learning is a student-centered approach by appealing students in teaching-learning activities and creating a classroom environment more attractive. This results enhanced student performance as well as creating positive student attitudes towards the learning process [3]. In addition to this, because active learning strategies integrate multiple learning approaches, such strategies are reliable for effective teaching-learning process.

To meet the demands of the students, we must use different methods of teaching and strategies for effective teaching and learning process. Stimulating and motivating is the main challenge to increase learners creative abilities of today's generation than learners in the past. The traditional lecture approach with the students may not be suitable for today's generation. This is why in schools all over the world there is a development from learning that is made up of facts to a new model [4].

In active learning, the learners have freedom and able to control learning activities. Usually, these activities involve problem-

solving, inquiry and investigational work, etc. [5]. In the same way, Aggarwal,S., and Jca,O has point out that the central purpose of education is to enable the learners to familiarize to a society, which is full of difficulty [6]. Not only social life is full of difficulties but there are problems and puzzling situations, which are a normal feature of a child's everyday life in school as well. Therefore, ability to solve problems in an effective and timely manner without any impediments must be encouraged in school learning through the use of active learning strategies.

Teachers' role has a direct influence on promoting active learning in classrooms [6]. Student centered learning connect students to activities such as reading, writing, discussion or problem solving, that encourage analysis, synthesis and evaluation of class content. It also gives informal opportunities for feedback on how they understand the material. When the teacher applied student centered learning style in the classroom, students become more expose to simulation, discussion, presentation, role-play, and other learning activities [7,8].

The fundamental elements of student centered or active learning methods are talking, listening, reading, writing, and reflecting in the classroom. These fundamental elements allow students to clarify question, combine and appropriate the new knowledge. Strategy is another factor for active learning to incorporate

the above four elements. Teaching resources also used to give confidence to students active participation and interaction with each other [1]. In relation to this many researchers also accomplish studies on active learning (student-centered teaching) approaches [9-16].

"Active learning" is a type of pedagogies established as being tremendously effective in engaging and maintaining student interest, thus most important to better student performance and retention of subject matter. The literature on active learning, in general, is very rich and robust. However, the vast majority of this literature addresses research and implementation of activities at the higher level. We believe that active learning, especially cooperative learning with its features of positive interdependence and structured individual and group accountability, may benefit primary school students learning as well. The challenge is to procure student buy-in to these practices [13].

On the other hand, the policy document entitled as "Teacher Education System Overhaul (TESO) program in Ethiopia was launched in 2003. In this document, among other major programs, one emphasizes the implementation of participatory, active- learning in the pre-service and in-service programs of teacher education [17].

However, it is expected that different factors hinder the practices of the active-learning method. During in my study of Higher Diploma Program (HDP) training and school placement, the researcher observed that teachers in the primary schools were not used the active learning methods to the level of expectation. Secondly in college-school linkage, the researcher observed the same fashion of teaching methods and even some primary school teachers also mentioned that there existed gaps among teachers in the implementation of active learning. In the same way during students' practicum placement, the researcher noticed that there is a gap in the implementation of active learning. Issues like these inspired me to find out and to what extent this issue affects the learning process in governmental primary schools. As confirmed in the above study some of the factors have not been assessed yet. As a result, the researcher of this study endeavor to investigate particularly the practices and challenges of active learning in North Wollo governmental primary schools of Woldia Town as an area of study.

1.2 Research Questions of the Study

This study will answer the following basic questions What challenges do teachers face to implement active learning methods?

How do teachers and students perceive active learning? How often do teachers bring into action active-learning strategies in their classrooms?

How often do students participate in active learning?

2. Methodology

A descriptive survey research design, which comprises qualitative and quantitative methods. Because it enables the researcher to get current information about the current practice and challenges to implementing active learning in Woldia Town primary schools.

There are 9 governmental second cycle (Grade 5-8) primary schools in Woldia Town. In this schools, the total number of teachers and students are 117 & 2524 respectively. The total number of teachers and students in these selected primary schools constitute the population of this study.

The samples are expected to be representatives. Accordingly, the sample size of both teacher and student participants was determined by using a sample size determination formula of:

$$\frac{n = Z^2 pqN}{Nd^2 + Z^2 pq}$$

Where n = the Size of the sample, Z = the standard normal deviation, d = degree of accuracy, N = total population, p = proportion in the target population estimated to have a particular characteristics, if there is no reasonable estimation, we use 50 %(0.5) & q = 1-p.

Initially, this formula was used by Reddy determine the sample size that was conducted by him at Jimma University. So, for the present study the sample size was calculated as follows:

1. Teachers Sample Size (n1) =
$$Z^2pqN$$

 $Nd^2 + Z^2pq$
 $\overline{n1} = 51$
2. Students Sample Size (n²) = Z^2pqN
 $Nd^2 + Z^2pq$
 $n2 = 339$

Participants	Total Popu	ılation		Total Sa	mple	
	Male	Female	Total	Male	Female	Total
Principals	3	1	4	2	1	3
Teachers	61	56	117	31	20	51
students: Grad 5	485	342	827	50	42	92
Grad 6	267	273	540	30	37	67
Grad 7	239	268	507	25	35	60
Grad 8	270	259	529	31	35	66
Total	1325	1199	2524	169	170	339

Table1: Sample size of respondents (Principals, teachers, and students)

Out of the 4 school principals, 3 were interviewed. But one principal was not available for interview after frequent visits. Out of 188 grade five and six sample population 12 (male = 8 & female = 4) and out of 131 grade seven and eight sample population 8 (male = 5 & female = 3) did not return the tool administered. And out of the total teachers, the responses of 1 male teacher were not complete. Therefore, out of 339 students, only 319 students and 50 teachers responded properly. Thus, the study comprised 319 (male=169 and female=170) students, fifty teachers (30 males and 20 females) respondents.

A simple random and stratified sampling technique was also used to select students from the selected primary schools. In this case, students were divided into four strata disaggregated by sex and in their grade level (5,6,7 and 8). Then based on the sample size determined above, the instruments/questionnaires were distributed.

2.2 Data gathering Tools and Procedures

The study employed mainly qualitative and quantitative data collection tools. The relevant data were collected through classroom observation, interviews and questionnaires. Thus, the researcher preferred the qualitative method to describe the data that were collected by semi-structured interviews and the quantitative method to describe all close ended questionnaires and observation check list. Classroom observations were conducted in order to check teacher- student interaction in relation to active learning, classroom facility, student population in the classroom, teachers' and students' activities. To accomplish the purpose of the observation, 16 randomly selected teachers were observed.

To confirm the data obtained through questionnaires the researcher was conducted interviews with Supervisors and School Principles using structured, open-ended questions, which are related to the challenges and practices of active learning. The interview was conducted with the help of tape recorder and photo camera and it was carried at their schools.

Regarding data gathering procedures, pilot study was conducted prior to the administration of the final questionnaires to all respondents. The target of the feasibility study was to assess whether these exists vagueness, misunderstand and other weakness, if any, on the first draft of the questionnaire or not. The draft of the questionnaire was, hence, modified centered on the pilot test results before the actual field work. Finally, the questionnaires were distributed to the respondents and data were collected.

2.3 Method of Data Analysis

The data obtained from teachers and students through questionnaires, observation, and interviews were examined using descriptive and statistical analysis methods. The outcome of the study were reported using tables, graphs and percentages obtained from the numerical values assigned to the degree of agreement.

The quantitative data obtained from the selected primary school teachers and students through the questionnaires were analyzed by using frequencies, percentages. The observation checklist data was analyzed by percentages.

3. Theoretical and Conceptual Explanations on Active Learning at a Glance

Student centered teaching is an instruction method of teaching in which students actively participate in their learning and teaching process through student-centered activities that apply the higher-order thinking skills of analysis, synthesis, and evaluation rather than inactively pay attention to a teacher [3].

In order to make the teaching-learning process active, the following are some basic points to be considered [18].

Learning is effective only when students can use it, connect it to their day-to-day life, or actively participate in it. Effective learning involves providing students with a sense of progress and control over their own learning. Effective learning is not memorizing facts and lists of knowledge. Teaching only by giving facts is damaging young learners in that we are preventing meaningful learning from taking place. Learning facts alone is not enough to prepare students to understand and participate in a complex world. Teaching-learning must prepare students to solve problems and to use information from their environment and other sources to make a better life for themselves, their families, and their communities.

We must provide the students with full of information so they can understand different perspectives and have many inputs. We must encourage students to communicate effectively about what they are doing and what they are learning. We must pose problems of emerging relevant to students. A focus on students' interests and use their previous knowledge as a departure point helps students engage and become motivated to learn. By such principles we seek and value students' point of view.

The fundamental activities for all students are talking and listening, writing, doing, reading and reflecting, and then strategies of active learning use one or more of these activities. Examples are Problem-Based Learning, Team-Based Learning, Concept maps, Collaborative writing, Brainstorming, Collaborative Learning, Teaching to learn/Peer teaching, Role Playing, Drama, and Simulations etc.

3.1 The importance of Active Learning to the Students

Active learning is important to increase students' remembering and comprehension of instruction, to explicit tasks, uses student's data and knowledge base, helps to develop their own answer, allows students to research ideas, develop and interpret concepts. And also able to engage a greater number of students in effective learning. In addition to this, affects positively the attitude of learners toward self and peer in the learning and teaching process. It also improve social experiences between learners and between teachers and students. Then it can build community within the classroom [19].

3.2 The importance of Active Learning to the Teacher

Active learning focuses on the instruction, helps to the teacher to select objectives in the level of students' needs. The teacher inspires the students to be accountable for their own learning. Active learning take in to the students thinking and problem solving of the discipline. Researchers, for example, Bonwell and Eison elucidate that student centered learning is very crucial in the classroom, because of its powerful influence on students learning [3]. Similarly, Silberman states that active learning able to addresses the different learning styles of students [20].

3.3 Empirical Explanations on the Practice and Challenges of Active learning

Johnson, D.W & Johnson, R.T. reported that student-centered instructions seems to encourage students to form closer relationships with each another in working together [21]. In addition to this, each student-centered group academically able to score high marks and gained social skills through cooperative work. On the other hand, the students in the teacher-centered classroom did not spend as much time working cooperatively and thus hoodless of working relationship with one another. This idea also supported by Lee Manning, M.& Lucking, R. [22].

Silberman, delivers a key note that addresses a challenging issue to develop an environment in which students become actively engaged in learning [20]. Thus, after decades of research on teaching and learning strategy, the success of student centered learning has been clearly documented. However, in the institution of higher learning, there is challenges to incorporate the new model of active learning into their classrooms. Thus, some have hold this approach to instruction with passion while others seem more cautious in moving towards adoption. Anyway, active learning occurs in an environment where the student is at the center and the instruction is student-centered.

Learning occurs through the mediation of social interaction. Knowledge is not an individual possession, but socially shared and emerging from participation in socio cultural activities. Learning also requires social skills. This means that learners will need skills which make them capable of social interaction. Learning is related to our social history and interaction with other people. Active learning theories stress the social elements of learning, e.g. the importance of cooperative action, collaborative problem-solving, and sharing as tools for attaining deeper processes of learning and in many cases also achieving better results. This means participation in discussions, dialogues and mutually shared reflections, working in a responsible cooperation with other learners [23].

4. Results and Discussion

4.1 Results

Teachers and students Knowledge and experiences on active learning methods

From the total respondents 50% of the study participants strongly agreed and 46% agreed about Present knowledge depends on the previous understanding.

Regarding the teacher holds most of the knowledge necessary for the students, 46% of the respondents were strongly disagree. Only a few respondents were agreed.

From table 4.1. Indicated that 50% and 48 % of the respondents revealed that students learn when there is interaction. Most respondents (96 %) agreed that teaching facts alone is not enough to prepare students to understand their environment.

	Item	1		2		3		4		5	
		f	%	f	%	f	%	f	%	f	%
1.	Present knowledge depends on the previous understanding.			1	2	1	2	23	46	25	50
2.	The teacher holds most of the knowledge necessary for the students.	23	46	21	42	5	10	1	2		
3.	Students learn when there is interaction.					1	2	24	48	25	50
4.	I believe that teaching facts alone is enough to prepare students to understand their environment.	48	96	2	4						
5.	Teachers must encourage students to communicate effectively.							2	4	48	96
6.	Teaching must prepare students to solve problems.							2	4	48	96
7.	Active learning is intellectually more stimulating.							24	48	26	52
8.	Active learning improves the development of sense of commitment.							31	62	19	38
9.	Active learning offers opportunities for progress.							3	6	47	94
10.	Active learning prepares students for participation							32	64	18	36
11.	Active learning makes students responsible for their own learning.							12	24	38	76
12.	I know that active learning adds work load on teachers.			40	80			20	20		
13.	Active learning is not economical to use instructional aids.	19	38	31	62						

14.	Active learning requires a lot of time.	12	24	10	20	27	54	1	2
15.	The implementation of active learning requires well-trained teachers.					20	40	30	60
16.	In using active learning, teachers find it difficult to cover the prescribed syllabus.			10	20	25	50	15	30

1=strongly disagree 2= disagree 3= undecided 4= agree 5= strongly agree

Table 4.1. Knowledge and experiences on active learning strategies of teachers/N=50/

About 96% of the participants responded "strongly agreed" that teachers must encourage students to communicate effectively. Similarly 96% of participates responded "strongly agreed" about teaching must be prepare students to solve problems. 52% and 48% of the study participants responded "strongly agreed" and "agreed" respectively that active learning is intellectually more stimulating. 62% of the respondents agreed that active learning improves the development of sense of commitment. In supporting to this idea, 38% of the respondents also strongly agreed. 94% of the respondents strongly agreed that active learning offers opportunities for progress.

From the above table 4.1. 64% of teachers responded "agreed", 36% of teachers responded "strongly agreed" that active learning prepares students for participation.

76% of teachers responded "strongly agreed" and 24 % of teachers responded "agreed", meaning active learning makes students responsible for their own learning. Concerning the

teachers' workload, 80% of the respondents said that active learning does not add workload on teachers. But the remaining 20% of teachers agreed, that is active learning adds work load on teachers.

The majority of the respondents agreed that active learning is economical to use instructional aides. Concerning time constraint, 54% of the study participants said that active learning requires a lot of time. But 24% of teachers responded "disagreed", 20% of teachers responded "undecided".

Majority respondents (60% responded "strongly agreed" and 40% of responded "agreed") said that the implementation of active learning require well-trained teachers.

In using active learning makes it difficult to cover the prescribed syllabus , 50% of the teachers responded "agreed" , 30% of teachers responded "strongly agreed" and 20% of teachers responded "undecided".

Item	ıs	1		2		3		4		5	
		F	%	F	%	f	%	f	%	f	%
1.	I believe that learning depends on the previous under standing	5	1.57	218	6.58	11	3.45	106	33.22	175	54.85
2.	I believe that the teacher holds most of the knowledge necessary for us to learn.	69	21.63	175	54.86	13	4.07	51	15.98	11	3.44
3.	As to me lectures are the best ways of getting knowledge	101	31.66	191	59.87	27	8.46	0	0	0	0
4.	I learn more when I discuss in groups with students	32	10.03	58	18.18	3	0.94	58	18.18	167	52.35
5.	I believe that active learning motivates us to learn	0	0	0	0	5	1.57	80	25.07	234	73.35
6.	I believe that It is helpful if teachers tell us exactly what we need to do to learn.	27	8.46	11	3.44	48	15.04	133	41.69	101	31.66
7.	I believe that active learning is learning by doing	0	0	0	0	21	6.58	160	50.15	138	43.26
8.	I feel that active learning is a mechanism to make us busy all the time.	122	38.24	112	35.10	27	8.46	37	11.59	21	6.58
9.	I believe that learning is self- initiated.	0	0	0	0	3	0.94	133	41.69	183	57.36
10.	I believe that active learning prepares us for participation	0	0	0	0	11	3.44	96	30.09	213	66.77
11.	I learn more when I engage in open- ended activities.	0	0	0	0	74	23.19	160	50.15	85	26.64
12.	Active learning enhances passiveness instead of active involvement in learning.	128	40.12	160	50.15	32	10.03	0	0	0	0

	13.	Active learning enhances self-confidence	5	1.57	5	1.57	16	5.01	85	26.64	207	64.89
	14.	I feel that students work best when they are	0	0	11	3.44	13	4.07	106	33.22	189	59.24
ı		praised.										

1=strongly disagree 2= disagree 3= undecided 4= agree 5= strongly agree

Table 4.2. Knowledge and experiences on active learning strategies of Students/N=319/

As indicated in table 4.2, for the question, learning depends on the previous understanding, 54.86% of students responded "strongly agreed", 33.22% of students responded "agreed", 3.45% of students responded "undecided" and 6.58% of students responded "disagreed", meaning learning is depends on the previous understanding.

As shown in table 4.2, 54.86% of the participants agreed that the teachers don't hold most of the knowledge necessary for us to learn. 21.63% of also support this idea. 15.98% of students responded "agreed" meaning that the teachers hold most of the knowledge necessary for them to learn.

Based on table 4.2. 59.87% of students responded "disagreed" meaning that lectures are not the best ways of getting knowledge. 31.66% of students also support this idea. But 8.46% of students responded 'undecided".

The analysis of the data indicates that, 52.35% of students responded "strongly agreed" and 18.18% of students responded "agreed" that they will learn more when they discuss in groups. In contrast to this, 18.18% and 10% of students responded "disagreed".

For question, active learning motivates us to learn, 73.35% of the participants were "strongly agreed" and 25.03% of students responded "agreed" meaning active learning motivates them to learn.

From the above table, 31.66 % of students responded "strongly disagreed", 41.69% of students responded "agreed" meaning that it is helpful if teachers tell them exactly what they need to learn. But 15.04% of the study participants were "undecided" and 8.46%, 3.44% of students responded "strongly disagreed" and "disagreed" respectively.

In the table 4.2. 43.26% of students responded "strongly agreed", 50.15% of students responded "agreed" meaning that active learning is learning by doing. But 6.57% of students responded "undecided".

From the table 4.2. 38.24% of students revealed "strongly disagreed", 35.10% of students responded "agreed" meaning that active learning is not a mechanism to make them busy all

the time. 6.58% of students responded "strongly agreed" and 11.59% of students responded "agree" meaning that active learning is a mechanism to make them busy all the time. But 8.46% of the respondents were "undecided".

In table 4.2. 57.36% of students replied "strongly agreed", 41.69% of students replied "agreed" meaning that learning is self-initiated. Only 0.934% of students replied "undecided".

As indicated table 4.2, 66.77% of students responded "strongly agreed", 30.09% of students replied "agreed" meaning that active learning prepares them for participation. 3.44% of the respondents were "undecided".

From the table 4.2. 26.64% of students replied "strongly agreed", 50.15% of students replied "agreed" meaning that they learn more when they engage in open-ended activities. But 23.19% of the respondents were "undecided".

The above table 4.2. shows for the question, active learning enhances passiveness instead of active involvement in learning, 40.12% of students responded "strongly disagreed", 50.15% of students replied "disagreed" meaning that active learning is not enhances Passiveness instead of active involvement in learning. But 10.03% of the respondents were "undecided".

As indicated table 4.2, 64.89% of students replied "strongly agreed", 26.64% of students responded "agreed" meaning that active learning enhances self-confidence. But the remaining respondents were not agreed.

In the above table 4.2. 59.24% of students replied "strongly agreed", 33.22% of students responded "agreed" meaning that students work best when they are praised.

4.2 Teachers' and Students Practices of Active Learning Strategies

From table 4.3, different active learning strategies were provided as representatives. Accordingly, 98% of teachers replied "frequently" meaning that teachers frequently used lecture/explanation methods of teaching. Only 2% of teachers responded "sometimes".

How	often do you use these active learning methods	1		2		3		4		5	
		f	%	f	%	f	%	f	%	f	%
1.	Lecture/ explanation					1	2	49	98		
2.	Project method			13	26	37	74				
3.	Problem solving method			25	50	11	22	14	28		
4.	Role-playing			20	40	30	60				
5.	Discussion							13	26	37	74
6.	Brain storming					32	64	18	36		
7.	Peer Teaching					22	44	28	56		

8.	Cooperative learning					13	26	37	74		
9.	Field trip	39	78	11	22						
10.	Group work							22	44	28	56
11.	Question and Answer							19	38	31	62
12.	Demonstration					31	62	19	38		
13.	Debating					30	60	20	40		

1= not at all 2= rarely 3= sometimes 4= frequently 5= always

Table 4.3. Teachers' practices of different active learning Strategies/N=50

As indicated in table 4.3. Concerning project method of teaching 74% of teachers replied "sometimes" and 26% of teachers responded "rarely" used. Regarding problem solving methods, 50% of teachers responded "rarely", 28% of teachers replied "frequently" and 22% of teachers responded "sometimes" meaning that half of the respondents rarely used problem solving method of teaching.

Concerning the role playing, 60% of teachers revealed "sometimes" and 40% of teachers replied "rarely" meaning that teachers rarely used. 74% of teachers responded "always" meaning they always used discussion method of teaching. The remaining 26% of teachers "frequently" used.

In the case of brainstorming method of teaching, it was found that 36% of teachers replied "frequently" and 64% of teachers responded "sometimes" meaning mostly teachers used brain storming method of teaching.

For peer teaching, 56% of teachers replied "frequently" and 44% of teachers responded "sometimes" meaning majority of teachers used peer teaching.

Regarding cooperative learning, 74% of teachers "frequently" used and 26% of teachers "sometimes" used.

From table 4.3. concerning field trip teaching methods, 78% of teachers responded "not at all" meaning teachers not used at all field trip method of teaching. Similarly, 22% of teachers replied "rarely" used.

Regarding the utilization of group work, 56% of teachers responded "always" meaning that teachers always used group work method of teaching. Similarly, 44% of teachers responded "frequently" used.

Moreover, to the item that teachers used question and answer in the real teaching learning process, it was found that 62% of teachers "always" used and 38% of teachers "frequently" used. With reference to demonstration method of teaching, 38% of teachers "frequently" used and the majority 62% of teachers "sometimes" used. Regarding debating teaching methods, 40% of teachers "frequently" used. The remaining 60% of teachers "sometimes" used.

How	often do teachers use	1		2		3		4		5	
these	active learning methods	f	%	f	%	f	%	f	%	f	%
1.	Lecture/ explanation	11	3.44	16	5.01	37	11.59	133	41.69	122	38.34
2.	Project method	106	33.22	74	23.19	58	18.18	48	15.04	32	10.03
3.	Problem solving method	106	33.22	128	40.12	85	26.64	0	0	0	0
4.	Role-playing	27	8.46	53	16.61	117	36.67	64	20.06	58	18.18
5.	Discussion	0	0	43	13.33	80	25	64	20	134	41.66
6.	Brain storming	21	6.58	51	15.98	122	38.24	72	22.57	53	16.61
7.	Peer Teaching	5	1.67	48	15.04	125	39.18	85	26.64	82	25.70
8.	Cooperative learning	32	10.03	74	23.19	144	45	27	8.46	43	13.47
9.	Field trip	191	59.87	106	33.22	21	6.58	0	0	0	0
10.	Group work	0	0	11	3.44	53	16.61	133	41.69	122	38.24
11.	Question and Answer	11	3.44	32	10.03	53	16.61	96	30.09	128	40.12
12.	Demonstration	27	8.46	48	15.04	90	28.21	122	35.10	43	13.47
13.	Debating	11	3.44	80	25.07	144	45.14	85	26.64	0	0
1= nc	ot at all 2= rarely 3= some	etimes 4	= frequent	tly 5	= always		•	•	•	•	

Table 4.4. Students' participation in Active learning/N=319/

From table 4.4, different active learning strategies were provided as representatives. Regarding lecture teaching methods, 38.34% of students responded "always", 41.69% of students responded "frequently", 11.59% of students replied "sometimes" meaning

that mostly teachers used lecture method of teaching.

Regarding project method of teaching, 33.22% of students responded "not at all", meaning that teachers not actually used.

23.19% of students replied "rarely" that is teachers rarely used. 18.18% of students replied "sometimes", and 15.04% of students responded "frequently" and 10.03% of students replied "always". Accordingly, project method is not implemented by the majority of teachers.

As indicated in table 4.4, 40.12% of students replied "rarely" and 33.22% of students responded "not at all" meaning that teachers not used problem solving method teaching. However, 26.64% of students replied "sometimes", teachers sometimes used problem solving method teaching.

As shown in table 4.4, it was found that 41.66% of students responded "always", 20% of students replied "frequently", 25% of students responded "sometimes". But 13.22% of students responded "rarely". Meaning that discussion method is implemented by the majority of teachers.

Concerning brainstorming method of teaching, 16.61% of students replied "always", 22.57% of students responded "frequently". The majority, 38.24% of the study participants replied "sometimes", the remaining 15.98% and 6.58% of students responded "rarely" and "not at all" respectively.

As indicated table 4.4, item 7, 25.70% of students responded "always", 26.64% of students replied "frequently" used. The majority of the respondents, 39.18% of students replied "sometimes" and 15.04 % of students responded 'rarely" used. Meaning that sometimes majority of teachers used peer teaching.

Concerning cooperative learning, 13.47% of students replied "always", 8.46% of students responded "frequently" used.

However the majority, 45% of students replied "sometimes" used cooperative learning method of teaching. But 23.19% of students replied "rarely" used and 10.03% of students responded "not used at all".

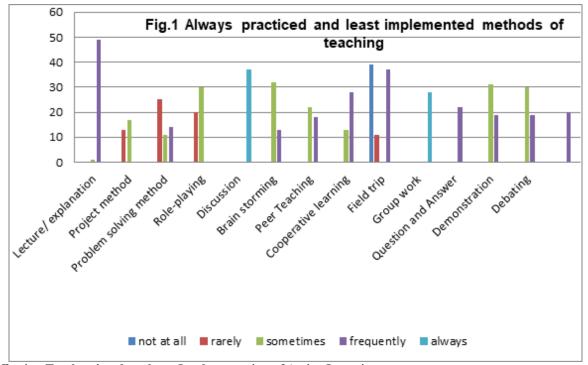
As presented item nine, the largest percentage, 59.87% of students replied "not at all", 33.22% of students replied "Rarely". The least proportion, 6.58% of students responded "sometimes" used field trip method of teaching.

From the total study participants of 319, 38.24% of students responded "always", 41.69% of students replied "frequently" used. Besides 16.61% and 3.44% of students responded "sometimes" and "rarely" used respectively. Meaning that mostly teachers used group work method of teaching.

Concerning question and answer method of teaching, 40.12% of students replied "always", 30.09% of students responded "frequently" and 16.61% of students responded "sometimes" used but the remaining 10.03% of students responded "rarely" used.

For demonstration method of teaching, 13.47% of students replied "always", 35.10% of students replied "frequently", 28.21% of students replied "sometimes". But 15.04% of students replied "rarely" used.

As indicated table 4.4, for debating method of teaching, 26.64% of students revealed "frequently", 45.14% of students replied "sometimes" used. But 25.07% of students revealed "rarely" used.



Factors Affecting Teachers' and students Implementation of Active Learning

Fact	ors Affecting Implementation of Active learning	1 /Not s	erious	2 /Un	decided	3 /Seri	ous	4 /Mo	
		F	%	f	%	f	%	f	%
1.	teachers' tendency to use traditional/ lecture method	26	52			5	10	19	38
2.	Shortage of time to practice active learning in classroom	26	52			18	36	6	12
3.	Student' lack of interest in active learning	18	36	6	12	25	50		
4.	teachers' lack of interest in active learning	31	62			6	12	13	26
5.	Lack of resources	31	62			19	38		
6.	Shortage of Time	18	36	13	26	6	12	13	26
7.	Large class size	6	12			18	36	25	50
8.	teachers' belief and perception	19	38			4	8	27	54
9.	Students' belief and perception	12	24	10	20	28	56		
10.	Diversity of students' interest	25	50	6	12	19	38		
11.	Some students' dominance during group activities			12	24			38	76
12.	The design of the teaching books	32	64	10	20	8	16		

Table 4.5. Factors Affecting Teachers' Implementation of Active Learning (N=50)

From table 4.5. 52% of teacher responded "not serious", 38% of teachers responded "most serious" and 10% of teachers replied "serious" concerning the accomplishment of teacher's lecture/explanation method of teaching.

From the total study participants, 52 % of teachers replied "not serious", 36% of teachers replied "serious" and 12 % of teachers responded "most serious" concerning shortage of time to practice active learning in class room.

Besides, the respondents were asked to what extent lack of students' interest affect the implementation of active learning. It was found that 50% of teachers replied "serious", 36% of teachers replied "not a series" problem. The remaining respondents, 12% were undecided.

For teachers lack of interest in active learning, 26 % of teachers responded "most series", 62 % of teachers replied "not a series problem". Similarly 12% of the respondents replied a series problem.

As indicated the above table, 38 % of teachers said "serious", But 62 % of teachers said that lack of resource was not a series problem.

Concerning shortage of time, 26 % of teachers replied "most series", 12% of teachers replied "serious" and 36% of teachers said "not series". The remaining respondents, 26% were undecided.

As indicated table 4.5, item 7, 50 % of teachers revealed "most series", 36% of teachers revealed "series" problem to practice active learning. In contrast to this 12 % of teachers revealed that large class size was not a series problem to practice active learning.

Concerning teacher's belief and perception, 54% of teachers revealed "most series" problem and 8 % of teachers revealed "series" problem. But 36% of teachers said "not a series" problem.

On student's belief and perception, 56 % of teachers responded "series", 24% of teachers responded "not series" problem. The remaining respondents were undecided.

Concerning diversity of student's interest, 38 % of teachers responded "series". But half of the respondents, 50% said not series problem to implement active learning in the class room. The remaining percent of respondents were undecided.

Concerning students' dominance during group activity, 76% of teachers replied "most series" problem to practice active learning in the class room. But 24% of teachers were undecided.. For the design of teaching books, 64% of teachers replied "not series" problem to practice active learning in the class room. Only, 16 % of the study participants replied a series problem. The remaining, 20% of the study participant were undecided.



A child is sleeping while the teacher is teaching. Is active learning implemented?

Fact	ors Affecting Implementation of Active learning	1 /No	t serious	2 /Undo	ecided	3 /Serio	ous	4 /Mo	
		F	%	f	%	f	%	f	%
1.	teachers' tendency to use traditional/ lecture method	74	23.19	32	10.03	85	26.64	128	40.12
2.	Shortage of time to practice active learning in classroom	53	16.61	48	15.04	133	41.69	85	26.64
3.	Student' lack of interest in active learning	175	54.85	69	21.61	43	13.4	32	10.03
4.	teachers' lack of interest in active learning	27	8.46	58	18.18	112	35.10	122	38.24
5.	Lack of resources	98	30.72	66	20.68	96	30.09	58	18.18
6.	Shortage of Time	80	25.07	48	15.04	101	31.66	90	28.25
7.	Large class size	117	36.67	53	16.61	64	20.06	85	26.64
8.	teachers' belief and perception	43	13.47	48	15.04	149	46.70	80	25.07
9.	Students' belief and perception	85	26.64	58	18.18	106	33.22	69	21.63
10.	Diversity of students' interest	122	38.24	43	13.47	69	21.63	85	26.64
11.	Some students' dominance during group activities	37	11.59	85	26.64	128	40.12	69	21.63
12.	The design of the teaching books	170	53.29	43	13.47	106	33.22		

Table 4.6. Factors affecting student's participation in active learning (N=319)

As indicated in table 4.6, 40.12% students revealed "most series", 26.64% of students responded "series" problem for teachers' tendency to use traditional/ lecture method. But 23.19% of students replied "not series" problem. The remaining, 10.03% respondents were undecided.

From the total respondents, 26.64% of students replied that shortage of time to practice active learning in class room was the "most series" problem and 41.69% of students replied a "series" problem. But 16.61 % of students replied "not series" problem.

Regarding the students' interest in active learning, it was found that the majority, 54.85 % of students replied "not series" problem. On the contrary 10.03 % of students replied "most series" 13.47% of students replied "series" problem. Concerning teachers' lack of interest in active learning, 38.24% of students replied "most series", 35.10% of students replied a "series"

problem. In contrast to this 8.46% of students replied "not series" problem. The remaining 18.18% of the respondents were undecided.

For lack of resources, 18.18% of students replied "most series", 30.09 % of students replied "series", but 30.72% of students responded "not series" problem.

Regarding shortage of time, 28.25% of students responded "most series", 31.66% of students replied "series" problem to practice active learning. But 25.07 % of students replied "not series" problem.

Concerning large class size, 36.67% of students revealed "not series", 20.06% of students revealed "series", and 26.64 % of teachers revealed "most series" problem to practice active learning.

Relating to teachers' belief and perception, 25.07% of students

revealed "most series", 46.70% of students revealed "series" problem. But 13.47% of students responded "not series" problem. As indicated in the above table, 21.63% of students responded "most serious", 33.22% of students replied "serious" concerning students' belief and perception about active learning implementation. But 26.64% of students replied "not series" problem. Regarding diversity of students' interest, 26.64% of students replied "most series", 21.63% of students replied "series" problem to implement active learning in the class room. However, 38.24% of students replied "not series" problem. From the above table, 21.63% of students responded "most serious", 40% of students replied "serious" and 26.64% of students responded "undecided" concerning the dominance of some students during group activities to practice active learning

in the class room. But 11.59 % of students replied no dominance among students. Concerning the design of teaching books, 33.22% of students replied "series" problem to practice active learning in the class room, but 53.29% of the study participants replied not a series problem. The remaining participants were undecided.

4.3 Analysis of the Data Obtained Through Observation

The data obtained through classroom observation is presented below. To accomplish the purpose of the observation, 16 randomly selected teachers were observed. To collect the data checklist were used. The observation was conducted by the researcher and the result of observed information were added up and discussed in the following table.

List of items	Yes		No	
Classroom condition	N	%	N	%
Is there enough sitting space for all students?	4	25	12	75
Are the seats movable?	4	25	12	75
Is the classroom layout arranged to facilitate active learning?	5	31.25	11	68.75
Is there enough space for movement between desks?	5	31.25	11	68.75
Is the class size appropriate?	3	18.75	13	81.25
Are the desks arranges in straight row?	1	6.25	15	93.75
Teachers' Activity	N	%	N	%
Arranging students for different classroom activity	4	25	12	75
Clarifying the learning objective	2	12.5	14	87.5
Giving direction about the procedures and activities	2	12.5	14	87.5
Using different instructional methods to implement active learning.	1	6.25	15	93.5
Encouraging students to become active participant	4	25	12	75
The teacher is more active than the students.	12	75	4	25
The teacher is active in explaining, monitoring and describing.	6	37.5	10	62.5
Managing the class for active learning implementation.	4	25	12	75
Using an exercise to elicit students' ideas knowledge and skill.	5	31.25	11	68.75

Table 4.7 Classroom condition and teachers activity /Number of observation= 16/

As showed in table 4.7, the data obtained from the actual classroom observation revealed that the classroom condition and seating arrangement is not conducive to put into practice. One major problem observed in the classroom was the lay-out of the classes. From the total 16 observation, 68.75% of the observation result indicates that the classroom lay-out is not arranged to the smooth functioning of active learning in the classroom. The physical environments of the classroom do not reproduce the required circumstance intended for active learning practices. In relation to this idea 75% of observation showed the seats were not movable in all the 4 schools. 93.75% of the observation indicates that the desk arrangements were not in straight chain but the rest of observation showed the desks arrangements were straight sequence.

As indicated table 4.7, the classroom observation result showed that most of the activities that should be implemented by teachers were not observed. From the total of 16 observations, more than 90% of the observed classes did not demonstrate the use of different instructional methods to implement active learning. This situation was supported with the interview conducted in the actual field work. Accordingly, the interview showed that, a number of the teachers confirmed that applying all the activities in classroom is not easy. This indicates that the teachers implement the traditional/teacher fronted approach to teaching. The reasons for not applying the activities mentioned in table 4.7 may be lack of training on active learning and classroom conditions such as large class size and fixed desks.

Items	Yes		No	
Activities of Students During the Lesson	N	%	N	%
Students are participating in problem solving activities	3	18.75	13	81.25
Students are playing roles	4	75	12	75
Students are discussing issues in groups	5	31.25	11	68.75
Students are taking part in peer teaching	4	25	12	75
Students are practicing demonstration	2	12.5	14	87.5
Utilization of Instructional Material	N	%	N	%
Are there charts, posters, diagrams?	4	25	12	75
Does the teacher use these instructional materials other than books?	2	12.5	14	87.5
Does the teacher illustrate ideas, concepts or points with the help of different instructional materials?	2	12.5	14	87.5
Class Evaluation	N	%	N	%
teacher gives group work, ask questions gives exercises for the learners	5	31.25	11	68.75
teacher follows up students' participation and activities	4	25	12	75
Instructor elicits response from learners instead of supplying answers	7	43.75	8	56.25
teacher evaluates students group cooperation	7	43.25	8	56.25
Instructor checks and gives constructive feed back to the students' work.	5	31.25	11	68.75
Students are listing passively during the lesson.	6	37.5	10	62.5

Table 4.8. Activities of Students during the Lesson, Utilization of Instructional Material and Class Evaluation

The observation result of table 4.8 indicates that 81.25% of Students were not participating in problem solving activities. Only 18.75% of students were participating in problem solving activities. On the other hand the observation showed that students were not describing the required actions for their own learning. Among 16 observed sessions, only 31.25% of them were observed discussing issues in their groups. The main reason for their deprived participation may be the failure of their teachers to use active learning in their respective classes (see table 4.8).

At the same time as in table, 4.8 the observation result indicated that 87.5% of the observed classes showed, there was no instructional material. But only 12.5% of the observed classes showed, teachers were use instructional materials. Regarding class room activities, as indicated table 4.8, all classroom activities were not well performed by the home room teachers. For example, many teachers did not give group work activities, ask questions or give exercises. Moreover more or less all of the teachers did not follow up students' participation and activities. According to the observation result, only 31.25% of the teachers check and give constructive feedback to students' work but the majority of the respondents, 68.75% of the observation indicates that teachers does not check and give constructive feedback to students' work.

5. Discussion

In this section of the study, an endeavor is made to give details to the results of the study with situation to the vital questions formulated under the statement of the problem.

Perception of Teachers and Students

Various research findings confirmed that there are strong relationships between teachers' and students' attitudes towards

active learning and their effort in implementing it. For instance, proved that instructors and students who had a positive attitude towards active learning showed a better effort in implementing and using active learning than those instructors and students who perceived active learning negatively showed that teachers' attitudes have a great influence in the effective implementation of active learning [24,25]. Concerning with these ideas, sixteen statements for the teachers and fourteen statements for the students were included in the questionnaires with the aim of assessing their knowledge or perception of active learning. Hence, it appeared that almost all of the teachers and students showed their agreement and strong agreement with the assumption of active learning raised in the questionnaires.

The level of their agreement with the assumptions of active learning showed us that the teachers and the students have perceived active learning positively. But despite their positive perception, most teachers didn't practice active learning in their classroom. This is also witnessed during the classroom observation and discussion with school principals. For example, some teachers see themselves as good teachers and therefore see no rationale to change their traditional methods of teaching. Regarding to this issue, discussions with school principals revealed that both teachers and students have a positive perception, even though not at all, towards active learning methods. Moreover some school principals also mentioned that there is a difference in perception of utilization of active learning by the old curricular trained teachers and the newly curricular trained teachers. Accordingly, they added that, while the newly curricular trained teachers were implementing the active learning methods, the old curricular trained teachers were mostly reluctant to do so. So that the implementation of active learning was not to the level of expectation by all teachers.

• Practices of Active Learning

The collected data showed that, teachers implement active learning occasionally in their classroom. The responses of the teachers to question related to their use of active learning were validated by the responses of the students and school principals. Students generally tended to agree that teachers use active learning sometimes.

The most frequently practiced learning methods reported by the teachers and students were group work, discussion, lecture, peer-teaching and answer and questioning. These methods were employed widely, because both teachers and students were familiarized with the methods. But these methods especially, discussion and group work can help to develop only lower level of cognitive domain. On the other hand, other active learning methods related to higher level of cognitive domain believed to develop critical thinking and problem solving capacity of the students were not widely practiced. The majority of the students disclosed that these methods were employed rarely. In line with this, Bonweel and Eison noticed that students must do more than just listen [3]. They need to read, write, discuss or engage in problem solving activities. In authentic active learning, students must be engaged in higher order thinking skills as synthesis, analysis and evaluation. Again strong relationships between the perception of teachers and students established between group work and discussion. In general, both the teachers and students agreed that active learning practice takes place sometimes.

To end with, the remaining active learning methods, role-play, debating, cooperative learning are practiced at irregular intervals in the primary schools as depicted in the finding. Based on the position of the two groups of respondents and the interview and observation made by the researchers, it is possible to infer that the extent of the practice of active learning in the schools is not practical genuinely. An interview made with school principals for the practicability of active learning in the school, one of the school principal responded that:-

Active learning is important not only to the students but also for teachers. However during my visit, he said in the learning and teaching process sometime in the near past some teachers were sitting idle on the pretext that students are doing their group work. But, large numbers of students were talking issues which were not related to the topic under discussion. The principal said that despite the government gave undue emphasis on the implementation of active learning at all levels; there are wide individual differences in the implementation of active learning. He also added that while some teachers misuse the active learning methods in pretext that they are implementing effectively, others complain that implementation of active learning adds more workload to the teacher and students did not have a prior knowledge to practice active learning. In general he said, whatever the magnitude is, there is a great variation in the implementation of active learning by school teachers.

On the other hand in schools where active learning methods are partially implemented, students are benefited from practicing active learning. For example, the principal from Taytu Bitul primary school explained that students are benefited from

project works. Students were invited to visit the nearby saving institutions and on the return they replied that they have developed the importance of saving during their reflection.

In other instances teachers were on the opinion that their practice of active learning was influenced by work over load. But in most of the schools, the school principals explained that workload is not a problem to implement active learning.

Teacher's knowledge on active learning

The practicability of anything is on the basis of knowhow of the matters. Hence teachers and school principals were asked to what extent they know the common active learning methods. One of the school principals, from Adengur primary school, replied that all teachers do not have similar status of "knowhow" of active learning methods as a result of lack of continuous training on active learning methods in the school. He also said that except some teachers, the majority did not get enough training on how to implement active learning, even though those who trained were several years ago facilitated and organized by Dessie College of Teachers Education. Accordingly, all teachers did not have equal skill and knowledge on the implementation of active learning. Recently, we are requesting woldia college of teacher's education, from where you come to get training. More over the continuity of training is a necessary condition to practice active learning.

• Factors Affecting the Implementation of Active Learning

Like any other educational issue in the teaching-learning process, it is also possible to think that active learning may have shortcomings or constraints during its implementation in the real classroom conditions. Of these constraints, the researcher has selected four most serious possible factors affecting the implementation of active learning in the schools. These factors are Teachers and students tendency to favor traditional/lecture method, Lack of teaching material resources. Shortage of time. Lack continuous and sustainable training on the methods of active learning which are selected on the basis of the responses of the teachers and students. With respect to these problems the two groups of the respondents agreed that these are the major problems which are negatively affecting the implementation of active learning. Supporting this fact, Farant explains the effect of time [26]. The author stresses that shortage of time limits teachers and students from implementing active learning in the classroom. In this study, the teachers' tendency towards traditional lecture method is blamed as an obstacle in the implementation of active learning by many students and some teachers.

With respect to this problem, the two groups of respondents again agreed that the tendency of teachers and students to the traditional methods of teachers' explanation or lecture was the major problem negatively Influencing the effective implementation of active learning. In this connection, Zewdu, A. A explains the tendency of teachers to the traditional lecture method [27]. He stresses that, many teachers perceived teaching as a transmission process where the teacher transmits knowledge to students and the students receive that knowledge based on specified official syllabus. Sometimes, it is observed that students categorize teachers who initiated them to practice active learning in the

class as either not well prepared or incompetent. The question here is why teachers tend to use traditional method of teaching. It is observed from their background information that most of them did not get training on active learning. Furthermore teachers believed that the classroom condition and the lack of resources force them to prefer lecture method

Moreover, even though lecture method is considered as the traditional methods of teaching by many educators, surprisingly, it is still one of the most widely practiced methods of teaching. The rational they stated as to why they frequently used lecture methods beside others is that they believed that they can cover a large amount of content within a short/brief period of time.

Apart from the above mentioned four major factors, the other one is some teachers were assigned to teach subjects outside from the area of specialization. For example, for an Open ended question with teachers showed that when teachers are not available for a particular specialized subject, they are assigned to teach close related subjects. For example at one time because of the absence of health and physical education teacher, one of them had been assigned to teach physical education. Because of this the teacher said that he did not feel comfort to practice active learning in the classroom and in the field. This implies that, placing teachers to teach outside in their areas of specialization, though closely related negatively influence the implementation of active learning.

The other factor mentioned by many primary school teachers to practice active learning it that when materials and equipments are insufficient or not available at all. Teachers were asked what factor determines them to practice active learning in their primary schools. Many of them replied that when the availability of materials is scarce or not available at all for students they to the maximum use formal demonstration methods of teaching where the teacher is the major actor while students are the audience.

In current time the government of Ethiopia gave great emphasis on the science subjects. To materialize the aim facilities in schools should be available. However in areas where this research is conducted, the other major factors mentioned by school principals, teachers and students are lack of laboratory chemicals and equipments and recurrent closing of schools negatively influence the practice of active learning.

Similarly, the implementation of active learning was also influencing by the workload, even though it is not a serious and major problem [28].

6. Conclusion and Recommendation

6.1 Conclusion

Based on the findings of the study, the following conclusions were drawn.

Active learning is practiced sometimes in the classes of the primary Government schools. Concerning the key factors that affect the implementation of active learning, the following are found to be negatively affecting. Teachers and students tendency to favor traditional/lecture method. Lack of teaching material resources. Shortage of time and lack continuous and sustainable

training on the methods of active learning. For many teachers and students they realized that active methods of teaching imply that mostly group work.

6.2 Recommendations

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.

- ❖ The result of this study identified that lack of in-service training on active learning that hindered the practice of active learning. So, the concerned bodies of the college and Woreda education office together must conduct in- service training for teachers, so that their use of active learning method will be improved.
- ❖ Teaching material development also was another problem in the school. The Amhara Region Education bureau and other stakeholders should give more attention in the process of designing teaching books. In the book preparation, Pedagogical, language and subject editors should be involved in the process of designing of teaching books. Therefore, the book writers should include activities, exercises, group works, pair works, debating during the design of the books since instructional materials have a great role in the implementation of active learning.
- ❖ The result of this study revealed that the classroom condition, that is, the arrangement of seats, to implement active learning tends to be low. The major reasons appear to be lack of resources and other teachers and students related factors. Hence, an overall assessment and discussion is needed between implementers of active learning (teachers and students) to enhance the implementation of active learning.
- ❖ Classroom management was one of the observed series problem in the implementation of active learning during the actual field work. Hence, the administration of the school and other stakeholders should design and implement a mechanism to monitor the practice of active learning regularly.

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