

# The Practice and Prospects of Active Learning Methods in Wollo University

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## Abstract

This study was mainly designed to assess the practice of active learning in university classrooms. For this purpose instructors from the two campuses of Wollo University were conveniently selected. Data was collected using open and close ended questionnaires, interviews and observation. A total of 70 instructors filled the questionnaire. The type of research employed for this study was descriptive survey research. The collected data were organized, analyzed and interpreted both quantitatively (using percentages and mean values) and qualitatively (using narrations and descriptions). Finally, the results revealed that the instructors did practice active learning but in a low scale. Lecture methods, discussion, cooperative learning, and question-answer methods are mostly used active learning methods. There were various hampering factors affecting the overall practice of active learning strategies including shortage of time, large class size student's lack of interest for active learning method and shortage of teaching materials. Based on the findings, reconsidering the modular modality system and revising the training forms for instructors are recommended.

**Key words:** active learning; lecture method; learning; Higher Diploma Program (HDP).

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## **1. Introduction**

### ***1.1. Background of the Study***

Learning, a word and concept which used exhaustively and interchangeably within the academic culture, is one of the most complex and least understood constructs. Learning, and the conditions in which it occurs, is dependent on multiple variables, as well as contexts. According to [1], traditional views of learning posit that learning occurs through the transfer of information from knowledgeable sources, such as textbooks or elders; from one who is more informed, to the passive recipient, where it is stored along with other information, until drawn upon for a particular purpose. Due to the ever-accelerating pace of a changing and uncertain world, to be successful today's learners must be equipped with the appropriate skills and knowledge needed to master interconnected forces of speed, complexity and uncertainty. This means learning faster, analyzing situations logically and solving problems creatively. Additionally, younger learners have had exposure to technology from an early age, making them "digital natives" who process information in a random access manner, rather than in a linear way [2]. Thus, the definition of literacy has expanded from an emphasis on comprehension of page text and listening to lectures to the need for a broader set of skills that requires more activity-based competencies across a wide range of subjects and disciplines. Contemporary views of learning recognize the importance of allowing children to take control of their own learning by engaging in active learning, meta-cognition and transfer of knowledge [3]. This newer approach to learning favors curriculum methods and materials designed to allow students to apply concepts being learned to real-world contexts, build local and global communities of practice, and allow opportunities for learning in and out of the classroom [4]. Many twenty-first century classrooms have started to move toward a philosophical orientation to teaching that favors more active learning, allowing students to be active constructors of their own and others' knowledge [5]. Active learning, a participatory form of educating students where the teacher creates conditions so that students can take charge of their own learning, moves the learner beyond the role of passive listener and note taker. [6] Considers any instructional method that engages students in the learning process as active learning. According to [7], active learning involves students in doing things and in thinking about what they are doing. Active learning is certainly not a new construct in education. Historically, active learning was most likely the first form of education used in a hunter/gatherer society where the youngest members of the society learned to survive while watching and mimicking their elders. Throughout the centuries other educational philosophers such as [8,1,9], and [10] have advocated for learning through play, practical and sensory experiences to promote complex intellectual constructs and abstract reasoning. In the last several decades, active learning has been promoted in higher education settings, where students have often been found to struggle with focusing on lectures and lose attention during the duration of a class. In one such study, [11] surmised that when students were passive recipients during lectures, the acquisition of facts took precedence over the development of higher cognitive processes, such as analyzing, synthesizing, and evaluating.

### ***1.2. Statement of the Problem***

Learning is a complex activity and an innate part of human development. [12] Describes learning as the product of continuous interaction between development and experience through life. Philosophers, psychologists and educationalists have analyzed how learning takes place and have put forward various theories to describe the process of learning. According to [13] three theories of learning have had particular influence on teaching and learning: Behaviourism (Skinner), Constructivism (Piaget) and Social cognition (Vygotsky). In recent years, however, there has been a cultural shift from an emphasis on teaching to an emphasis on facilitating learning. Developing individuals and personalized learning have become part of the twenty first century. This student centered approach incorporates assessment for learning, improving students 'higher order thinking skills, encouraging learners to be independent and developing strategies for consulting students about their education. It also emphasizes that the quality of learning is shaped by the learner's experience. [13] refers to —the learning journey through school; college and university in which teaching and learning strategies, assessment for learning and student centered approaches are very significant in determining a student's success. He refers to [14] in the United Kingdom which states that —High quality teaching explicitly builds on learner needs – as well as on high expectations and good subject knowledge. Thus, The teaching and learning process in any institution shall be whatever the methods of delivery employed, interactively student centered that shall promote active learning (FDRE Higher Education Proclamation, 17th September 2009, p5005). Active learning includes a variety of teaching methods such as small group discussion, cooperative learning, role playing, hands-on projects, and teacher driven questioning. Authors calling for a combination of teaching approaches to stimulate learning in students with different learning styles, advocate active learning techniques which include the visual, auditory and kinesthetic aspects of learning. [15] describe active learning activities that require students to use a variety of learning techniques, promote retention of large amounts of information, and encourage greater social interaction through peer discussion. Teachers across a wide range of subjects and grade levels are proposing and using active learning strategies, recognizing that by allowing students to be involved in their own learning they are encouraging them to take greater responsibility for their own education. In the active learning classroom, the teacher's role is to talk less and facilitate more by setting up situations and experiences that allow students to be immersed in the material with their peers, while socially constructing greater understanding of the curriculum. Teaching strategies that promote active learning have five common elements. These include, 1) student involvement beyond mere listening; 2) more emphasis on the development of skills and less on transmittal of information; 3) student involvement in higher order thinking skills; 4) student involvement in activities, such as reading, discussing, writing; and 5) an emphasis on students' exploration of values and attitudes [7]. Having what has been explained above in mind, the Ministry of Education of Ethiopia has incorporated active learning methods in the Higher Diploma Program (HDP) training with the intension of promoting teacher/instructors use of active learning methods in their teaching. As Wollo University is not exceptional to launch the program, it started the HDP training some years ago and many teachers have been certified by the program. However, studies that could reveal if the HDP training has brought practical changes in the actual implementing of active learning methods have not been conducted. Hence, this study is intended to fill this gap.

To this end, the research addresses the following questions:

1. Do instructors properly practice active learning methods in their teaching?
2. Which teaching strategies are most used by instructors?

3. What are the major challenges of using active learning methods in the university?

## 2. Review of Related Literature

### 2.1. The Concept of Active Learning

It is not possible to provide universally accepted definitions for active learning that equally understood by different authors in the field. However, it is possible to provide some generally accepted definitions. One of the most cited definition is the one given by [7] defined active learning as any instructional method that engages students in the learning process. In a similar senses [16] described Active learning refers to techniques where students do more than simply listen to a lecture. Students are DOING something including discovering, processing, and applying information. They identified two important assumptions where by the concept of active learning should build on:

- (1) That learning is by nature an active endeavor and
- (2) That different people learn in different ways

The core elements of active learning are student activity and engagement in the learning process. Active learning is often contrasted to the traditional lecture where students passively receive information from the instructor. When we think of a classroom instruction where students learn beyond passive recipient of information we are talking about active learning. Active learning is an instructional method in which learners actively participate in their learning process via learner-centered activities that exercise the higher order thinking skills of analysis, syntheses, and evaluation rather than passively listening to a lecture [17]. In line with this, [18], states that when learning is active, students perform most of the activities or the works, using their brains, analyzing ideas, solving problems and applying in their daily life what they have learned. He further extended his explanation by saying that active learning is interactive, supportive, fun, and fast-paced and personally engaging every learner and thus become effective when employed.[7], also suggested learners work collaboratively, discuss materials while role playing, debating, engage in case study, take part in cooperative learning, or produce short written exercises etc. [19], has stated that teachers' practice in active learning is to use classroom instructional methods that encourage the students to be as active as possible by analyzing and interpreting knowledge. All the above narrations view active learning as a classroom situation in which students learn by actively engaged in the instructional process. Quality teaching is based on the premise that all teachers should teach well and all students should learn well. Similarly, Ramsden (1992) in [20] stated that "the aim of teaching is simple: it is to make student learning." Students are an important element in the learning environment and are the ultimate consumers [21]. [22] indicate that, most students go to school wanting to learn and that student misbehavior is typically a sign of poor teaching. The learner is active when he/she is engaged mentally and motivationally in a task [20] The most powerful and positive learning outcomes occur in those contexts where students' knowledge and interests are well matched to the nature of learning task and when the students were actively involved in the lesson (Reece and Walker, 2003). Learners must have an intrinsic motivation for active learning. In this regard,) [23] citing John Dewey also stated that "the teacher is a guider

and director, he/she steers the boat but the energy that propels it must come from those who are learning.”

Thus, active learning refers to the active involvement of the learner on different learning tasks with in and out of the classroom [24].

## ***2.2. The Importance of Active Learning***

Different research reports claim that students learn best when they engage with course material and actively participate in their learning. In the traditional view teaching is the transmission of information. The teacher is like a radio transmitter beaming out data to be received by any student whose receiver is tuned to the right frequency. Information, correctly or incorrectly received, is recorded by the student receiver so that it can be transmitted back later as proof of reception. A shift from simple transmitter of information to learner supporter requires both a shift in philosophy and in practice. The first thing is that there is no one best method that helps students to build all rounded personality. The traditional /lecture/method serves only little purpose. It is limited to the teaching of lower level learning outcomes. On the other hand it does not help for the teaching of higher order thinking skills and psychomotor domains .Therefore, failure to recognize the limitation and unable to adjust instruction will be a betrayed of professional responsibility by the teachers. All teachers are designers of learning activities. The traditional teacher, however, has been designing the same activity (the lecture) over and over, perhaps for an entire career. Teachers who make the transition to Active Learning are often looking for the creative license that Active Learning gives in allowing them to design an infinite variety of activities Yet, the traditional teaching model has positioned students as passive receptors into which teachers deposit concepts and information. The model has emphasized the delivery of course material and rewarded students adept at reflecting the course content in assessments. The spoils have tended to go to students with good short-term memories and reading skills. Research suggests that students must do more than just listen: They must read, write, discuss or be engaged in solving problems [25]. Further, students must be engaged in such higher-order thinking tasks as analysis, synthesis, and evaluation, to be actively involved. Thus strategies promoting activities that involve students in doing things and thinking about what they are doing may be called active learning. Several reasons have been put forward for greater emphasis on active as opposed to more passive forms of learning. According to [26] explain that active learning can be more attractive for learners than more passive forms of learning because they can become more motivated and interested when they have a say in their own learning and when their mental activity is challenged. Being involved in the decisions about learning they can connect to their prior knowledge and their own needs and interests. Active learning has at least three advantages to learning. The first is motivation of students. Now a days it becomes evident that students are no more willing to attend lecture classes. According to Simpson [26] motivational and burn out problems of teachers may disappear when students are more motivated and more active learners. Besides, teaching will become more intellectually challenging when students are learning actively and independently. The second advantage is producing better learning. According to Felder and Brent, as little as five minutes of active learning activities per fifty-minute class session can boost learning significantly. The benefits can be as simple as waking students up after a dry or heavily technical lecture. More importantly: “Academically weak students get the benefit of being tutored by stronger classmates, and stronger students get the deep understanding that comes from teaching something to someone else. Students who successfully complete the task own the knowledge in a way they

never would from just watching a lecturer do it. Students who are not successful are put on notice that they don't know something they may need to know, so when the answer is provided shortly afterwards they are likely to pay attention in a way they never do in traditional lectures" [27]. Thirdly, active learning is the key for independent learning. Active learning can be more attractive for learners than more passive forms of learning because they can become more motivated and interested when they have a say in their own learning and when their mental activity is challenged. Being involved in the decisions about learning they can connect to their prior knowledge and their own needs and interests. In finding out things independently, they can follow their own interests and motivation. In the process they can learn to make decisions and take responsibility. Moreover, active learning is important because of opportunities for learning to learn. Students can learn how to learn by practicing how to do it. Giving them responsibility for parts of the decisions that can or should be made is one way to teach them how to learn.

### **3. Materials and Methods**

The purpose of this study was to investigate the practices and prospects of active learning methods in Wollo University in 2018. This chapter discusses the research design, population, sampling and sampling techniques, instruments and procedures of data collection and data analysis. The study strived to examine instructors' practices of active learning methods, thus descriptive survey was used as it enabled the researchers to describe the current status of an area of study. Accordingly, the target population of the study were all instructors of Wollo university (N=975).As it is too difficult to manage conducting this study on all university staffs, the researchers decided to undertake the study by taking sample instructors. The samples were selected conveniently due to their willingness to give information to the researchers. Questionnaire were administered to a total of 70 instructors ( 58 males and 12 females) from the both Dessie and Kombolcha campuses of Wollo university. Questionnaire, interview and observation were used to collect data about the implementation of active learning methods. The questionnaires had three parts. The first part of the questionnaire consisted of items that intend to assess the practice of active learning methods of instructors. The second part of the questionnaire assessed the most frequently used active learning strategies. In the third part of the questionnaire the respondents were asked about factors that affect the practice of active learning methods in the university. The researchers also used interview as a method of data collection to enrich and triangulate the data that were obtained through questionnaire. To this effect, two sets of interviews were designed and administered to instructors. To obtain the required information in this regard, semi-structured questions were designed. As [28], in semi-structured interview there are specific core questions determined in advance from which the interviewer branches off to explore in-depth information, probing according to the way the interview proceeds, and allowing elaboration, within limits. Before the process of the interview began, the researchers gave clear information about the objectives of the study and sought the participants' cooperation. Often, with only an occasional question for clarification, the participants talked a wide variety of topics throughout an extended interview. Lesson observations were conducted in several occasions. Because the researchers were working in the higher diploma program team as trainers, they got access to observe the lessons of several candidates. They helped the researchers to understand the methods utilized by the instructors. Even though observation and questionnaire are used to gather appropriate information from instructors, it would be more practical if we include the response and feeling of students which active learning is commonly used by their instructors for triangulation purpose. In

this study, both quantitative and qualitative analysis techniques were employed. The data collected through questionnaires were analyzed quantitatively using descriptive statistics (frequencies and percentages) and rank order applying SPSS 20. On the other hand, the data obtained through interviews and observations were analyzed in qualitative data analysis method. That is, the researchers analyzed the collected data based on the following data analysis procedures of [29]. First, the collected data were compiled. Second, by creating thematic framework, a category system was employed based on the research questions. Third, the quotes of respondents were sorted out by giving more emphasis for key words and phrases and making comparisons both within and between the cases were carried out. Fourth, lifting the quotes from their original context and putting similar ideas together by rearranging them under the newly developed thematic content. Finally, the data were mapped and interpreted in narrative form in order to make intellectual and philosophical sense. The idea of the respondents were also be supported by literature. Results obtained from such analyses were discussed.

**4. Results**

The purpose of this research was to investigate the practices and prospects of active learning in Wollo University. Its specific concerns were to study the instructors’ views, the actual practices of active learning and factors influencing its practice. This chapter will then present the findings and discuss these issues in relation to the research questions.

**4.1. Practice of Active learning**

In this section the instructors’ practice of active learning is analyzed. The results are presented below. Instructors were the main participants in the practice of active learning. Hence, they were asked different questions regarding their views on the implementation of active learning. Accordingly, the instructors’ responses are given below (table 1).

**Table 1:** Instructors’ practice of active learning (N=70)

No	Statements of practice of Active learning	Strongly agree 5		Agree 4		Undecided 3		Disagree 2		strongly disagree 1		mean		
		F	%	F	%	F	%	F	%	F	%			
1	I use student centered methods regularly.	22	31.4	38	54.3	6	8.6	3	4.3	1	1.4	4.10		
2	I encourage students to participate actively in the teaching learning process.	46	65.5	21	30	3	4.3					4.61		
3	My students are responsible for their own learning.	12	17.1	28	40	20	28.5	9	12.5	1	1.4	3.59		
4	I use varieties of teaching methods.	22	31.5	37	52.9	9	12.9	2	2.9			4.13		
5	I have both the knowledge and skill of using d/nt Active learning methods	21	30	38	54.3	9	12.9	2	2.9			4.11		
6	I regularly use active learning methods in my class.	17	24.3	38	54.3	13	18.6	2	2.9			4.00		
7	I use varieties of activities in my instruction.	25	35.7	34	48.6	8	11.4	3	4.3			4.16		
8	I usually use different teaching materials in my course.	20	28.6	32	45.7			13	18.6	3	4.3	2	2.9	3.93

9	My Students enjoy the lesson when I use active learning methods.	17	24.3	39	55.7	11	15.7	3	4.3	4.00		
10	Most of my students are independent learner.	4	5.7	21	30	26	37.5	16	22.9	3	4.3	3.10

As can be seen in the above table 1, ten items are listed with statements that show the practice of active learning in instruction. Accordingly, majority, 85.4 % (22+38) of the instructors agreed that they use student centered methods regularly (Item 1). Similarly, the vast majority of 95.5 % (67) the respondents rated that they encourage students to actively participate during instruction (item 2). Furthermore, majority 57.1 % (40) of the instructors feel that their students are responsible for their own learning as indicated in Item 3. However, for the question whether most of their students are independent learner or not, 37.5% and 27.2 % of the respondents undecided and disagreed respectively (Item 10). The response given for item 3 and item 10 contradicts with the assumptions and characteristics of active learning. Most literatures assert that if students assume responsibility for their own learning as a result of active learning instruction, they will be independent learners who are able to learn by their own, of course with little support from their teachers. Items 4, 6 and 7 asks about the frequency and the use of varieties of active learning strategies. All received positive response as reported by 59 (84.4 %), 55 (78.6 %) and 59 (84.3 %) respectively. Regarding the use of different materials in their courses, 52 (74.3 %) of them responded that they use different materials in their courses. This is also required from a teacher who wants to use active learning in his/her instruction. However, the data obtained through observation indicated that the only material used by most instructors is the power point. Moreover, there is little evidence that the power point is used to facilitate active learning. Generally, the responses by majority of the respondents indicate that instructors are practicing active learning in a better way - more than 70% in 8 of the 10 items. Although the data obtained from observation and interview do not support this magnitude. For example, participants of the interview “complained the block modality” for the inconvenience for applying active learning method.

**4.2. The use of some selected active learning strategies**

Instructors were asked to rate the frequency of their use of some selected teaching methods from always to not at all. The response is presented below.

**Table 2:** Frequency of Instructors practice on selected instructional strategies ( N=70)

No	Use of some Active learning strategies	always(5)		frequently4		sometimes 3		Rarely 2		Not at all		mean
		F	%	F	%	F	%	F	%	F	%	
11	Lecture/ explanation	38	54.3	25	35.7	6	8.6	1	1.4			4.43
12	Project method	14	20	21	30	22	31.4	9	12.9	4	5.7	3.46
13	Problem solving method	13	18.6	29	41.4	17	24.3	7	10	4	5.7	3.57
14	Role-playing	6	8.6	23	32.9	22	31.4	12	17.1	7	10	3.13
15	Discussion	20	28.6	32	45.7	14	20	3	4.3	1	1.4	3.96
16	Brain storming	19	27.1	29	41.4	15	21.4	6	8.6	1	1.4	3.84
17	Peer Teaching	8	11.4	19	27.1	24	34.3	16	22.9	3	4.3	3.19
18	Cooperative learning	14	20	32	45.7	16	22.9	6	8.6	2	2.9	3.71
19	Field trip	8	11.4	12	17.1	10	14.3	17	24.3	23	32.9	2.50
20	Group work	23	32.9	31	44.3	12	17.1	3	4.3	1	1.4	4.03
21	Demonstration	15	21.4	27	38.6	15	21.4	8	11.4	5	7.1	3.56



22	Debating	2	2.9	19	27.1	18	25.7	16	22.9	15	21.4	2.67
23	Seminar	8	11.4	14	20	15	21.4	10	14.3	22	31.4	2.65
24	Question and Answer	36	51.4	25	35.7	4	5.7	4	5.7	1	1.4	4.30

As shown in table 2, instructors were asked to rate on the practice of 14 selected learning strategies from always, frequently, sometimes rarely and not at all with values 5,4,3,2,1 respectively. The instructors rated lecture, question and answer, and group work to be used always in their instruction with 54.3 %, 51.4%, and 32.9 % respectively. Whereas, cooperative learning and discussion are frequently used by teachers with 45.7% rate each. Group work and problem solving methods are ranked second to be always used with 44.3% and 41.4% respectively. On the contrary field trip, seminar and debate are not used at all as reflected by 32.9%,31.4% and 21.4% respectively. Overall the data in the above table reflects that instructors regularly use few teaching strategies namely, lecture, question and answer, and group work. This is consistent with the data obtained through observation and qualitative data of the questionnaire. In relation to this instructors were asked to list 3 most frequently used active learning strategies in their instruction. Nearly all of them listed lecture, group discussion and question and answer as the most utilized method of teaching. This raises doubt on instructors' response to the first part of the questionnaire which they overwhelmingly reflected that they practice active learning in most of their instruction time. However the data from observation is inconsistency with the ratings of the lists of always and frequently used strategies. Instructors highly rely on lecture and question and answer methods. They rarely use group discussion as only active learning strategy. Nowadays it is not uncommon to see instructors stick to power point presentation for most of their classes. Some believe that they "cannot and should not teach" without power point i.e they believe that their course is exceptional and should be taught with power point. For example during session observation, some candidates/instructors pledged to call off the session due to electric failure.

**4.3. Factors Affecting the Practice of Active Learning Strategies**

Different factors might affect the implementation of active learning in teaching. As review of the literature, the factors could be teacher related, student related or materials and facilities related. Therefore, since one of the objectives of the research was identifying the factors affecting the practice of active in teaching, it is presented as follows.

**4.4. Instructors Response on Factors Affecting the Practice of Active learning**

The instructors were asked to rate 8 factors affecting the practice of active learning in teaching on a five point Likert-type scale which extends from no affect(1) to major affect(5). They selected the factors as major, moderate, neutral, minor or no affect. The rating scores were computed to percentages, mean value and rank order as presented in Table 3.

Table 3 shows some of the items were rated as factors that affect the practice of active learning in teaching. The mean values range from a maximum of 4.26 to a minimum of 3.03. Nearly all the factors in the list were reflected as potentially affecting the practice of active learning. At the top are shortage of time and number of students in a class reflected as major and moderate affect in combination with 82.9% and 78.6 % respectively

followed by shortage of materials. Even item 32 which talks about course content rated as major and moderate affect by 42.9%(30) respondents all together. In the open-ended questionnaire instructors were asked to list down other factors which affect the practice of active learning. Most of them listed teacher’s attitude, students’ interest, lack of resource and nature of curriculum.

**Table 3:** Rating Scores of instructors’ on factors affecting the practice of active learning (N = 69)

No	Factors affecting practice of active learning	Major affect = 5		Moderate affect =4		Neutral =3		Minor affect =2		No affect =1		Mean
		F	%	F	%	F	%	F	%	F	%	
25	The tendency to use traditional/ course based approach	20	28.5	30	42.9	13	18.6	4	5.7	2	2.9	3.90
26	Shortage of time to practice Active learning approach of teaching	34	48.6	24	34.3	8	11.4	1	1.4	2	2.9	4.26
27	Students’ lack of interest in Active Learning approach	26	37.1	29	41.4	9	12.9	3	4.3	2	2.9	4.07
28	Instructors’ lack of sufficient training on use of active learning	20	28.6	20	28.6	11	15.7	10	14.3	8	11.4	3.49
29	Students’ beliefs and perceptions of Active Learning	24	34.3	29	41.4	11	15.7	5	7.5			4.04
30	The classroom furniture like chairs and desks are not appropriate for active learning	40	57.1	11	15.7	11	15.7	4	5.7	3	4.3	4.17
31	The number of students in my class is large and is highly unmanageable to practice active learning	37	52.9	18	25.7	9	12.9	3	4.3	2	2.9	4.23
32	The contents of the courses I teach do not invite students for active participation.	7	10	23	32.9	15	21.4	13	18.6	11	15.7	3.03

## 5. Discussion

Educators have always tried to find the best way to teach students in a teaching-learning environment. Traditional methods are no more regarded as the dominant features of contemporary classrooms. The current thinking is that no one size of method fits for every purpose. As a result there is a paradigm shift regarding instructional methods. The uses of varieties of teaching methods are proposed in place of a single dominant method. Active learning approach is proposed to be the dominant philosophy in higher education institutions. Universities have been implemented this approach for a few years. However, its implementation seems ineffective. Therefore, the present researchers investigated instructors’ actual practice and factors affecting its practice.

### 5.1. Practice of active learning in teaching

The findings of instructors’ responses regarding the practices of active learning showed that instructors practiced active learning in the teaching and learning process. Regarding its practice (item 1), the mean value of the instructors response is 4.10, which is greater than the grand mean 3.97 for this item indicated that active

learning is practiced in the teaching and learning process. Similarly, the mean value (item 2) is (4.16) which are greater than the grand mean 3.97 for this item indicated that instructors encourage students to actively participate in the teaching learning process. Generally, the data from the questionnaire indicated that active learning is practiced in a better way. However, observation results showed that the practices of most of the activities showing its effective implementation were low. For instance, the observation data indicated that instructors highly rely on PowerPoint presentation and they do not use it to apply some ingredient of active learning. Previous researches support this assertion. For example, [30] described the Ethiopian education problems in general and the teaching learning process in particular as follows:

*Indeed, in Ethiopia, the problem of quality at all levels of the education systems has become a serious concern of the government, educators, teachers and stakeholders. Despite the past and existing strong criticism by educators, teachers and stakeholders on the conventional teacher based approach in all levels of the education systems of the country, the teaching learning process in most schools, colleges and universities in Ethiopia has persisted to be teacher dominated. Most classes are characterized by a situation where students are made to listen their teachers and copy notes from the blackboard and the power point.*

Given the different circumstances and current situation in the university, it is possible to underscore that the practice of active learning is at its lowest stage.

### **5.2. Frequency of Use of Some Selected Strategies**

Instructors were given some commonly cited learning strategies to rate on the frequency of their practice. Unsurprisingly, they rated lecture, question and answer and discussion as three most popular learning strategies they usually practice. It was also supported by the data obtained from the open-ended item of the questionnaire. This asserts that we are far behind the practice of active learning, as two of the most ranked strategies are regarded as traditional/teacher centered/ methods. The result is consistent with previous studies on the same issue. For example, Birhanu (2010), cited in [31], in his PhD dissertation studied the implementation of active learning methods in 6 Universities of Oromia Regional State of Ethiopia; in his findings he stated that traditional lecture methods, in which lecturers talk and students listen, dominate most classrooms. Moreover, [32] in his PhD dissertation “Active Learning in Teaching English Language Support Courses to First-Year Students in Some Ethiopian Universities” studied in three universities and he concluded that the practices observed in the study were dominated by the old teacher-centered approach of the behaviorist model. This clearly shows that the dominant teaching strategy is teacher centered method.

### **5.3. Factors Affecting the Practice of Active Learning**

Like any other educational issue in the teaching-learning process, instructors will face challenges or constraints during the implementation of active learning.

Among these constraints, the first four most serious possible factors affecting the practice of active learning in teaching which are selected by instructors using rank order are identified. These are shortage of time to practice active learning, the number of students in a class is large and is highly unmanageable to practice active learning,

the classroom furniture like chairs and desks are not appropriate for active learning, and students' lack of interest in active learning approach. Shortage of time is the first serious factor. With respect to this problem, the instructors agreed that it was the major problem negatively affecting the practice of active learning. In line with this, many respondents (see Table 3) responded that there was lack of time to actively involve students in the teaching learning process. Regarding time, [33] explain that although teachers may find learning approaches to be more enjoyable and lead to improved student learning, they still have questions about the amount of time and content that needs to be covered using the approaches. This is particularly true in the block modality that requires instructors to cover a course with a large content. The other major factor that affects the practice of active learning is students' lack of interest. Regarding this, the respondents again agreed that it was the major problem negatively influencing the effective implementation of active learning. Since active learning demands students to do more, their interest is crucial. The question here is why students' lack of interest on active learning. Should students be active in the first place? This is similar to the "hen-chicken argument". One major importance of active learning is that it attracts the learning interest of students. It is true that at the beginning students may tend to feel uncomfortable with the active learning approach. But as they go through they will like it because of the merit they see in it. Therefore, the key point regarding students less interest to learn via active learning shows either the instructors lack of knowledge active learning or unwilling to pay the price to develop students capacity to learn through active learning strategies. The other major factors negatively affecting the practice of active learning as reflected by the respondents are large class size and lack of necessary materials. No one disputes that these factors will hinder an effective practice of active learning. But many people believe that these factors do not block the teacher from using proper active learning strategies available. Therefore, it is no sound to consider these factors as an excuse for not using active learning strategies. For the time being the above factors are continued to be identified by teachers at all levels as a reason not to apply active learning. For instance, Aschalew (2012) cited in [33] conducted study on "The perception and practice of active teaching methodologies of teachers of college of education and behavioral sciences in Haramaya University" found out that instructors' tendency towards the traditional/lecture method, lack of students' interest, shortage of time, lack of instructional material and large class size were among the major factors affecting the effective implementation of active learning.

## **6. Summary and Conclusion**

### **6.1. Summary**

The main purpose of this study was to assess the practice of active learning by instructors of Wollo University. To this end, the following research questions were raised:

1. Do instructors properly practice active learning methods in their teaching?
2. Which teaching strategies are most used by instructors?
3. What are the major factors/ challenges/ of using active learning methods in the university?

Descriptive survey design was used to conduct the study. Convenience sampling was used in the selection of participants of the study. Questionnaire, observation and interview methods were used to collect the data. The

data gathered using questionnaires were analyzed quantitatively *mean and percentage*. On the other hand, the data gathered using interviews were analyzed qualitatively. The findings revealed that the instructors believe that they practice active learning in their instruction. But the response of the instructors on the other items and the data obtained through observation and interview contradicts it. The study also reveals that lecture, question and answer and discussion were the most widely used teaching strategies. The contributive factors that are perceived by instructors influencing the practice of active learning are related mainly with shortage of time, students' lack of interest, large class size and shortage of materials.

## **6.2. Major Conclusions**

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

1. The practice of active learning is still in its infancy stage.
2. Although there are several learning strategies are known to teachers, only few were over used.
3. Concerning the key factors that affect the practice of active learning, the following are found to be negatively affecting.
  - shortage of time
  - students lack of interest to engage in active learning
  - Large class size and
  - Shortage of materials

## **6.3. Recommendations**

Based on the findings, the following recommendations are forwarded:

- A training platform used should be devised for instructors at the college/school level to improve instructors' capacity on effective practice of active learning and related classroom issues.
- The modular modality needs to be reconsidered. Either we should stick to the old approach and cover the bulky content or we allocate reasonable time and adopt active learning elements. We cannot afford both. So it is up to the concerned bodies /from the departments to the ministry of education/ to initiate necessary revision.
- The instructors should understand that the traditional method is no longer taken as the best option for our instruction. Regard less of the challenges they face they should try their best to practice active learning. In other words they should shift from "shouters to supporters" of better student learning.

## **6.4. Recommendations for further research**

Base on the conclusions of this study, the researchers recommend the following for further investigation: There is a need to conduct further, more extensive, studies to better understand the situation and pursue fruitful ways. Practical ways to overcome the obstacles should also be investigated.

## References

- [1] Dewey, J. Experience and education. New York: Touchstone, 1938.
- [2] Prensky, M.. Digital Game-based Learning. McGraw-Hill, 2001.
- [3] Bransford, J., Brown, A., & Cocking, R. (Eds.). How people learn: Brain, mind, experience, and school. Washington, D.C.: National Research Council, 1999.
- [4] Huffaker, D.A. & Calvert, S.L.. The New Science of Learning: Active Learning, Metacognition, and Transfer of Knowledge in E-Learning Applications, 2003.
- [5] Ellerman, D.P. Global institutions: Transforming international development agencies In to learning organizations. The Academy of Management Executive, 1999, 13, 25-
- [6] Prince, M. Does Active learning works ?a review of research. Journal of engineering education, 2004.
- [7] Bonwell, C.C. & Eison, J.A. Active learning; Creating excitement in the classroom. ERIC Digest, 1999.
- [8] Rousseau, J.J. (1762) Emile, or On Education. Emile, or On Education.” [On-line], Available [https://en.wikipedia.org/wiki/Emile,\\_or\\_On\\_Education](https://en.wikipedia.org/wiki/Emile,_or_On_Education). Wikipedia CC BY-SA 3.0
- [9] Piaget, J. The Origins of Intelligence In Children. INTERNATIONAL UNIVERSITIES PRESS, INC. New York, 1951.
- [10] Kolb, D. A. Experiential learning: Experience as the source of learning and development (Vol. 1). Englewood Cliffs, NJ: Prentice-Hall, 1984.
- [11] Johnson, D. W., Johnson, R. T., & Smith, K. A. Active Learning: Cooperation in the College Classroom, 1991.
- [12] Blyth, W.A.L. (1984). Development, Experience and Curriculum in Primary Education (1<sup>st</sup> ed). London, Routledge. Available <https://doi.org/10.4324/9781315147352>.
- [13] Pollard, K.. Reflective Teaching: Evidence-informed Professional Practice, 2008.
- [14] The Teaching and Learning Research Programme .Personalizing Learning, 2004.
- [15] Simmons, K. & DiStasi, A. (2008). Active Learning Techniques: Engaging Students on the Road to Success. Athletic Therapy Today 13(6):6-8. DOI: 10.1123/att.13.6.6
- [16] Meyers, C. & Jones, T.B. Promoting Active Learning: Strategy for College Classrooms. San Francisco, CA: Jossey/Bass inc., 1993

- [17] Bonwell, Charles C. *Active learning: Creating Excitement in the Classroom*, 2000.
- [18] Silberman M. *Active Learning:101 Strategies to Teach Any Subject*. Boston: Allyn& Bacon, 1996.
- [19] Leu, E. *Quality of Education and Teacher Learning: A Review of the Literature*. USA; American Institution for Research, 2005.
- [20] Livingstone, G. *Taking Teacher Education Forward: Ten Steps towards Quality a Report*, 2001.
- [21] Schubert, W.H. *Curriculum: Perspective, Paradigm and Possibility*. New York: Macmillan, 1986
- [22] Sadker, M.P and Sadker, D.M. *Teachers, Schools and Society (6<sup>th</sup>ed.)*.Boston: McGraw Hill, 2003.
- [23] Aggrawal, J.C. *Principles, Methods and Techniques of Teaching*. (2<sup>nd</sup> ed.).New Delhi: Vikas Publishing House Pvt. Ltd, 2001.
- [24] Frazee, et al . *Integrated teaching Methods: Theory, classroom application, and field- based connections*, 1995.
- [25] Arthur W. Chickering and Zelda F. Gamson (1987).”Seven Principles for good practice in undergraduate education”. *American Association of Higher Education Bulletin*, vol.39 (no.7), pp.3-7.
- [26] Simons , P. R. J.(n.d). *Definitions and theories of active learning*.
- [27] R.M, Felder and R. Brent. “Learning by Doing.” *Chem. Engr. Education*,37(4),282-283. *The philosophy and Strategy of Active Learning*, 2003.
- [28] Center for Teaching Support and Innovation. *Active learning and Adapting Teaching Techniques*. University of Toronto,n.d.
- [29] Selinger, H. and Shohamy. *Second Language Research method*. Oxford: Oxford University Press, 1998.
- [30] Ritchie, J. and L. Spencer. *Qualitative Data Analysis for Applied Policy Research*. In *analyzing qualitative data*, 1994, pp.173-194.
- [31]Daniel, Y. *The implementation of active learning and continuous assessment in Pentecostal Theological college*. M.A.Thesis. Addis Ababa University, Ethiopia, 2014.
- [32] Kitaw, Y. *Active learning in teaching English language support courses to first-year students in some Ethiopian Universities*. Doctor of Education. University of South Africa, 2017.
- [33] Burns, C. & Myhill, D. *Interactive or inactive? A consideration of the nature of interaction in whole-class instruction*. *Cambridge Journal of Education*, 34(1), 35–49, 2004.