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The Practice of Active Learning Techniques in Governmental Secondary Schools: A Case Study of Debre Berhan Town in North shewa Zone, Amhara Regional state, Ethiopia Paragraph

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Abstract
The goal of this research was to demonstrate how active learning strategies are used in the teaching-learning process and to highlight the primary issues influencing the use of active learning approaches in public secondary schools. There have been several impediment challenges Having an overall impact, the use of active learning strategies such as , a shortage of materials and a budget constraint, heavy teaching loads, plasma and laboratory were not well functional, the curriculum, bulkiness of the content of text books, and for some subject it is time consuming. The data was collected using pre-tested written self-administered questionnaires, Structural interviews and observation. Questionnaire was administered to 910 secondary school students and 25 teachers. The Directors, Vice Directors and some randomly selected Teachers were interviewed using structural interview. The teachers and the students were observed by using checklist in different class lessons and the class lesson selected by random sampling method. The Quantitative and qualitative data were collected, processed, analyzed, and interpreted. Finally, the results revealed that both teachers and students rarely practiced active learning methods in their classroom.

Keywords: Active learning, Active learning methods, Challenges of Active learning method, Practice of active learning
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1. Introduction 1

Active learning is not a new concept. The roots of active learning can be traced back to Confucius (551-479 BC), He stated that, "I hear and I forget. I see and I remember. I do and I understand". Socrates (470-399 BC) had similar views when he said that ''I cannot teach anybody anything. I can only make them think''. Active learning is a discovery process in which the student, not the teacher, is the primary agent. Students learn more when they are actively involved in the learning activity than when they are passive consumers of instruction. Students will be able to take responsibility for their own learning when they are actively involved in the learning process. (Demirci 2017). So, active learning techniques are considered the most effective for deep learning and are becoming the preferred choices to be used in teaching process.

The practical and effective approach of thinking about teaching planning for secondary school students is the active learning framework. The middle grades classroom and teachers can meet the unique developmental needs of young adolescents while teaching the important content these students need to learn to be empowered to think critically about the world around them by incorporating carefully selected intellectual, social, and physical activities into secondary school, particularly the middle grades classroom and teachers can meet the unique developmental needs of young adolescents while teaching the important content these students need to learn to be empowered to think critically about the world around them (Edwards, 2015). Incorporating all of the above into classes would not only improve the learning environment and provide kids with a variety of learning opportunities, but it will also add more fun and excitement to any primary school classroom. (Takele, 2020).

Over the year's the value of using active learning instructional practices to increase student learning has been explored by scholars, researchers, and national reports in the secondary and preparatory school classroom and Active learning has gotten a lot of attention, according to researchers (Niculescu, 2009). Moreover, if this approach is well practiced in this level, students who have an opportunity to join universities will have a good experience to practice active learning methods & developing their academic performance.

The goal of this study was to explore at the use of active learning approaches in the classroom and incorporate with this its impact to assure education quality. Due to these reason, the goal of this study would to evaluate the practice of active learning in Debre Berhan town of public secondary schools. Based on this aim in mind:

1. What are the practices of active learning methods in Debre Birhan town of secondary schools?
2. What are the obstacles to the use of active learning methods in secondary schools in Debre Birhan town?

Should be guided in this study.

1.1 Literature Review 2

Meaning of Active Learning

In some ways, all learning is active, although certain types of learning are more active than others.

Active learning, according to Meyers and Jones, is learning that allows "students to talk and listen, read, write, and reflect as they approach the course content through problem-solving exercises, small informal groups, simulations, case studies, role-playing, and other activities, all of which require students to apply what they are learning" (Meyers and Jones, 1993). Any educational strategy that involves students in the learning process is referred to as active learning (Prince, 2004). In a short, active learning encourages students to engage in meaningful learning activities while also reflecting on their actions.

Student participation and involvement in the learning process are essential components of active learning.As a result, (Joel, 2006) defined active learning as the process of keeping students cognitively and frequently physically engaged in their learning through activities that require them to absorb knowledge, think, and solve problems. Active learning is a student's active impact on learning and a student's involvement in the learning process which allows students to focus on creating knowledge with an emphasis on skills such as analytical thinking, problem-solving and meta-cognitive activities that develop students' thinking (Demirci, 2017).

Major Type of Active Learning Methods

Experiential learning, cooperative learning, problem-solving exercises, writing tasks, Brainstorming, speaking activities, class discussion, case-study methods, simulations, role-playing, peer teaching, fieldwork, independent study, library assignments, computer-assisted instruction, and homework and other activities are major types of active learning techniques that focus on developing not only students' knowledge but also their skills and abilities by providing opportunities for them to apply what they've learned (Meyers and Jones, 1993).

Problem solving: helps students develop higher-order thinking abilities including summarizing, analyzing, and drawing conclusions and deductions. In problem-solving settings, discovery learning occurs when the learner draws on his or her own experience and past knowledge to uncover the facts to be learnt. In higher education and K–12 school contexts, the effectiveness of Active Learning in facilitating self-directed learning and problem-solving abilities is extensively recognized (Gijbels et al., 2005). According to the Ethiopian Ministry of Education (2002), in order to ensure the quality of education, students should have access to high-quality textbooks that promote active learning, as well as well-trained educators, teaching materials, and other school resources in sufficient quantity and quality.

Peer review: Students are given an individual homework assignment or a brief paper to complete.

Students send one copy to the teacher for grading and one copy to their partner on the due date of the assignment. After that, each student takes their partner's work and, depending on the nature of the assignment, provides critical comments, corrects problem-solving or grammar errors, and so on (Desta et al., 2009).

Experiential learning: Plan field trips for students to observe and experience how the theory/concepts presented in class are applied(Bartle, 2015; Gentry, 1990).

Questions and Answers: Students are encouraged to discuss and dispute, to develop assumptions about the relationship between causes and consequences, and to demonstrate originality and ingenuity by asking questions that are not too tough but demand comprehension (Jürima et al., 2016).

Collaborative Learning: While you go about the room answering questions, asking more questions, keeping the groups on track, and so on, provide a question on which each cooperative group will work.

After a period of time has been set aside for group discussion, encourage students to share their points of discussion with the rest of the class (Baines et al., 2007). Students have the opportunity to study, listen, and work with one another while also experiencing individual responsibility, positive dependency on one another, and debating the activities among themselves through learning together (Le et al., 2018).

Brainstorming: An ideal storm occurs when students develop as many thoughts as possible regarding a topic; it may be a terrific approach to begin a class on any topic. It can be done in a variety of ways: in groups, in pairs, or as a full class, with the instructor (or a student) writing the thoughts on the board on chart paper. It is a group creative approach aimed to produce a huge number of ideas for the solution of a problem. It is a terrific way to find out what kids already know about a subject as well as an excellent review exercise (Gultom and Gurning, 2016).

Practice of Active Learning

Many educators characterize the constructive learning method as a process in which students work independently or in small groups to explore, research, and solve real-world issues, and become actively involved in the pursuit of knowledge and information (Edwards, 2015). Students who participate actively in their learning become independent learners who actively generate new meaning within the framework of their present knowledge, experiences, and social contexts in active learning methodologies. With teachers as facilitators,

active learning allows students to learn by their own efforts and accept full responsibility for their own learning (Alemu, 2010).

''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'' (Omer et al., 2020).

Challenges to Practice active learning methods

According to research, after 10-20 minutes, audience interest in lectures begins to wane. Students will be more engaged if active learning approaches are used once or twice throughout a 50-minute lesson. Active learning should be explained to students by their teachers. Teachers, on the other hand, face several obstacles in fostering active 11learning in their classrooms (Takele, 2020). Teachers may feel a lack of direct control at first, and active learning methods (ALMs) take more class time, so teachers can't cover as much material in one class, planning active learning exercises takes more preparation work, which teachers can't always spare, and many teachers have done well as lecturers thus far, so they are less inclined to overhaul their current teaching methods. Teachers' lack of support, tools, and cash from their academic institution to explore novel teaching techniques, as well as huge class numbers, impede many active learning approaches from being implemented realistically.

Greater teaching helpers, more space, or a larger budget to purchase materials for in-class activities are all needed by teachers and instructors.

Finally, and sadly, integrating more active learning may be a pain.

Furthermore, teachers' teaching practices are tied to their understanding of what teaching is all about (Kember and Kwan, 2000). Another big stumbling block might be the students' learning styles. There are many different learning styles, and most people have a dominant learning style. Visual/Spatial, Auditory, and Kinesthetic are the three styles.

Visual learners like to see information, auditory learners prefer to hear information, and kinesthetic learners learn best when they are physically engaged in their learning (touching, doing, and feeling). Active learning is most likely to assist kinesthetic learners (Fayombo, 2015; Ginja, 2016). Furthermore, limited class time, huge class sizes that can be difficult to manage, a lack of resources, and heavy teaching loads may all play a role in motivating teachers to transition to a "content-centered" approach (Downs and Wilson, 2015).

1.1.1 Methodology 3

Research Design

The research was carried out in Debre Birhan, Amahara regional state, Ethiopia, at six governmental secondary schools (Grade 9 – Grade 12). Because the town only has six government secondary schools in the 2020/21 academic year, these schools were chosen using available sample techniques. The study was conducted in the form of a descriptive survey. The study's data was gathered using three methods: pre-tested written self-administered questionnaires, structured interviews, and observation.

Population of the Study

The study's participants were all volunteers who were randomly and purposefully selected students, teachers, school directors, and vice directors in the academic year 2020/21. On this regard, the randomly selected thirty (30) teachers participated in the study from the targeted secondary schools. All the directors and the vise directors were selected due to their manageable number. From the total populations of 8,758 (grade 9 – grade 12) students, 943students were selected from the selected schools by using random sampling method.

Data Collection Instruments

In this study, written questionnaires, structural interview and observation were employed as data gathering equipment. A teacher's questionnaire was distributed to 30 teachers from the selected schools, but only 25 of them responded. Teachers completed a five-point Likert-scale questionnaire (Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4), and Strongly Agree (5) that focuses on the use of active learning methods in the classroom, as well as the major problems/challenges that prevent them from doing so. A total of 943 students were given a questionnaire, and 910 of them were returned and examined. The students also completed a five-point Likert-Scale questionnaire (Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree/Neutral (3), Agree (4), and Strongly Agree (5)) that focused on the practices as well as the barriers to using Active learning strategies in their classes.

The researcher explained the aim of the questionnaire and provided detailed instructions on how to fill out all of the items for all of the sample pupils at the chosen schools face to face. To improve the research's findings, the researcher watched the selected teachers throughout their usual teaching learning process and documented it using an observation checklist that had been established previously. The researcher interviewed directors, vice directors, and sample teachers in the selected schools and videotaped them using a digital camera, as well as

replies to the written questionnaire, and records of observation checklists, to triangulate the data and interview records by digital cameras were used to study actual practice of active learning methods (techniques) in the selected schools.

Methods of Data Analysis

Following the collection of the relevant data on each topic, the data was edited, coded, tabulated, and processed in order to answer the study questions. Descriptive statistics were used to analyze the collected data. Descriptive presentation was discussed of findings being sometimes supported by theoretical arguments and the other type of presentation from the responses Percentages, frequency, and mean values were used to examine the data.

The replies of students and teachers to a questionnaire on their usage of active learning methods were used to address the first study question. Directors, vice directors and teachers' responses to interview questions, the data collected from observation checklist, and teachers' questionnaire on the challenges of practicing of Active learning techniques were utilized to answer the study's second question.

Findings / Results

Table 1. Socio-Demographic Characteristics of the Respondents

No	Demographic Characteristics	Teachers		Principals		Students	
		Total	%	Total	%	Total	%
1	**Gender**						
	Male					440	48.4
	Female					470	51.6
2	**Age**						
	15 -25					**910**	**96.5**
	25 -60	**20**	**66.67**	**5**	**16.67**		
	>61						
3	**Education Qualification**						
	High school					**500**	**53**
	Preparatory					**410**	**43.48**
	Degree	**14**	**46.67**	**4**	**13.33**		
	Master degree	**4**	**13.33**	**5**	**16.67**		

The researchers tried to balance for the interview both sexes (male and female), with different subject specialization and work experience. From the total number of interviewers almost all had degree qualification.

Table 2. Analysis for practicing active learning of the respondents (students)

No	Variables	Categories	Frequency	%
1	Practicing active learning	Not participate	520	57.14
		Participate	390	42.86

As indicated in the table above, 57.14 % of respondents said they were unable to use active learning techniques in their teaching learning process, while the remaining 42.86 % said they have used active learning methods in their teaching learning process. The researcher might argue that active learning was not widely used in Debre Berhan town governmental secondary schools.

Table 3. Analysis of student's perception on active learning

No	Variables	N	Minimum	Maximum	Mean	Std. Deviation
1	Students perception towards AL	910	1.00	5.00	2.4836	0.75278

As we have seen in the above table, the perception of students on active learning was a minimum of 1.00 and a maximum of 5.00. Also in average the mean value of the students' perception was 2.4836. Thus, from this result we can conclude that students have negative perception on the use of active learning strategies to the teaching and learning process.

Table 4. Analysis of students' engagement on different methods of active learning

No	Variables	Scale									
		Definitely		**Probably**		**Possibly**		**Probably**		**Definitely not**	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1	Do you know how to use Group projects in your learning class	116	12.7	271	29.8	242	26.6	119	13.1	194	21.3
2	Did several of the students participate actively in both cognitive and emotional activities?	9	1	35	3.8	232	25.5	315	34.6	352	38.7
3	Do you know how to connect prior knowledge and experience?	12	1.3	60	6.6	272	29.9	320	35.2	278	30.5
4	Do you know how to use practical work in your learning class?	116	12.7	271	29.8	242	26.6	119	13.1	194	21.5
5	Do you know how to individual interview in your learning class?	9	1	35	3.8	232	25.5	315	34.6	352	38.7
6	Do you know how to use brain storming in your learning class?	111	12.2	277	30.4	240	26.4	116	12.7	192	21.1
7	Do you know how to use Group discussion in your learning class?	116	12.7	271	29.8	242	26.6	119	13.1	194	21.3
8	Do you know how to use case studies in your learning class?	116	12.7	271	29.8	242	26.6	119	13.1	194	21.3
9	Do you know how to share your own experience in your learning class?	9	1	35	3.8	230	25.3	315	34.6	352	38.7
10	Do you know how to use Group work in your learning class?	116	12.7	271	29.8	242	26.6	119	13.1	194	21.3
11	Do you know how to answer to offered questions with their own ideas/ thoughts?	12	1.3	60	6.6	272	29.9	320	35.2	278	30.5
12	Do you know how to ask questions?	12	1.3	60	6.6	272	29.9	320	35.2	278	30.5
13	Do you know how to use one minute paper in your learning class?	12	1.3	60	6.6	272	29.9	320	35.2	278	30.5
14	Do you know how to make debate in your learning class?	9	1	35	3.8	232	25.5	315	34.6	352	38.7
15	Do you know how to use peer review/feedback in your learning class	12	1.3	60	6.6	272	29.9	320	35.2	278	30.5

The engagement of students on active learning techniques has shown in the above table 4. This result showed us most of the students in average (12.7% definitely, 29.8% probably and 26.6% possibly) were know how to engage mainly on group project, brain storming, practical work, group discussion, case study and group work. The result had shown that the students were highly engaged on those techniques of active learning and 13.1% of students were probably not and 21.3% of students definitely did not know how to engage on those techniques. While most of the students i.e. in average 34.6% of the students were probably not and 38.7% of the students were definitely not known how to engage on debate, participate actively in both cognitive and emotional activities, and mentally, sharing experience, interview and class feedback. Moreover, most of the students in average 35.2% probably not and 30.5% of the students definitely not known how to engage on peer review, respond to posed questions with their own words, one minute paper, ask questions, and connect prior knowledge and experience.

1.1.2 Discussion 3

According to the questionnaire, 57.14 % of respondents said they couldn't use active learning techniques in their teaching and learning. The researcher might infer that active learning was not widely used in Debre Brehan town public secondary schools. This finding is in contrast to the findings of (Benson and Blackman, 2003; Bonwell and Eison, 1991), who found that students must do more than merely listen. They must read, write, discuss, or participate in problem-solving exercises. The majority of students were not engaged in most active learning approaches. The researcher had dread that Active learning practiced (implemented) as expected in targeted schools.

In average the mean value of the students' perception was 2.4836. As a result of this finding, we may deduce that students have a negative attitude about the employment of active learning approaches in the classroom. Perception is important in applying AL in the classroom, according to (Bezabih, 2018). If students think it's a good idea, it should be implemented, but if they think it's a bad idea, it's tough to claim it's being used in the classroom. The key issues that influenced the use of active learning strategies were teachers' and students' beliefs and perceptions. Furthermore, when students' perceptions improve, so does their classroom practice, i.e., instructors with a good opinion of ALM were more effective in adopting ALM in the classroom than teachers with a negative perception. A survey conducted in Botswana in 1999 found that instructors and students who had a good attitude toward active learning put in more effort to develop and use active learning strategies than teachers and students who had a negative attitude toward active learning.

According to the interview, 53.3 % of the interviewee responds that the facilities in the school environment are available. The major facilities available in the school surroundings are teaching materials, teacher's and student organization (teachers share their experience with 1 to 5 groups and taking training given by different institutions) and classroom arrangement. The teaching materials were good to practice active learning methods in the classroom such as plasma, reference books, world map, manuals. Classroom management include student 1:5 siting, Number of chair, class size and laboratory. Even though, some difficulties exist for example, in some school there was shortage of references book, plasma and laboratory were not well functional. But the rest 46.7% of the interviewers said that the schools did not have facility to practice active learning techniques.

Most of the teachers expect from the school managements were that to renew the siting chair because most of the chairs in the class are old and crashed. Therefore, the managements work on this to make the teaching environment should be conducive for the teaching and learning process and build additional classes to address active learning techniques. In addition to this, the curriculum should be revised particularly mathematics & physics subjects, number of teachers to be maximized, build ICT room, and organizing sport field through cooperation with the community and education bureau. Teachers tried in some existence to use various type of ALT depending on the content of the subject. From the total of teacher and school director interviewed during the study period 36.7% said they used group discussion, 16.7 % question and answering, 13.3 % peer education, 10.0% lecture and 6.7% demonstration. The interviewee also reported that they used other type of active learning techniques rarely such as brain storming, case study, debate and dialogue etc.

Almost all (83.3%) of the respondents responded that they faced many challenges to practice active learning methods in the classroom. Most of the challenges that reported by the interviewers to practice ALT were: negative attitude of both teachers and students, bulkiness of the content of text books, shortage of knowledge about active learning methods and for some subject it is time consuming. Furthermore, the students have low academic performance from the lower grade up to secondary schools, because the teacher, the school administrator and the kebele education sector could not give more attention in order to laid down the proper base in the primary school. Most of the teacher believed that in general active learning has no shortcoming if it is practiced carefully and appropriately. But in some case AL has its own disadvantage. For example: in large class size it is impossible to address all students, its facilities, disturbance in the classroom, and difficulty for managing the classroom activities and covering the whole content of the text book.

The researcher observed during the classroom teaching; of the sample teachers, 85.5% natural teachers and 80.15% social teacher in all selected schools used some active learning methods (ALMs). 70.25% of natural and 92% of social teachers' open session with overview of prior lesson and introduce the daily lesson. 72.5% of natural and 64.6% of social teachers use brain storming method and the remaining didn't use it. Only 48.8% of natural and 33.3% of social teachers use group discussion method and 22.5% of natural teachers conducting practical work. But there is a laboratory room which is not well organized. All natural teachers create an opportunity for asking and answering questions method and 87.5% social teachers also use it. 62.75% of natural and 36.4% of social teachers apply different types of presentation and around 24.75% of natural and 37.4% of social teachers use one-minute paper ALM. All natural and social teachers did not practice (implement) peer instruction method and 44.8 % natural teachers and 92.7% of social teachers did not use role playing method and 12.25% of natural and 32.25% of social teachers' use learning by teaching method. Most of natural and social science teachers used brain storming, asking and answering question method and group discussion method were more implemented (practiced) by natural teachers than social teachers and 74.75% of natural and 92.65% of

social teachers summarizes the daily lesson.

In all schools there were charts, posters, diagrams, chalkboard and plasma in and around the class. 58.5% of natural and 36.4 % of social teachers demonstrated ideas with the help of different instructional materials and the remaining did not use it. The classroom is conducive to facilitate ALM. That is 42.5% for natural subjects and 66.65% for social subjects and the class size is sufficient to apply AL 56% for natural subjects and 64.6% for social subjects.

Regarding to the students; the researcher observed among the selected students, 75.25 % of natural students and 42.75% of social students participated in answering questions and problem solving but the other 54.75% of natural and 70.35% of social students participated in brain storming methods. 39.75% of natural and 15.6% of social students participated equally in group discussion and 32% of natural and 18.65% of social students participated in whole class presentation. 11.25% of natural students participated in practical work and 28.5% of natural and 23.9 % of social students gave class feedback. 38.5% of natural and 51.1% of social students ask question about the daily lesson and 39.75% of natural and 28.1% of social students are discussing issues in groups. 60.75% of natural and 37.4% of social students in majority participate in teaching learning process in the class. Generally, from the observation, natural students had more participation in answering and questioning, problem solving, group discussion and whole class presentation; the social students used brain storming methods and ask question when comparing from others ALM.

CONCLUSION

The point of the study was to analyze the use of active learning methods (ALMs) in selected secondary schools in Debre Brehan town, with a focus on students' and teachers' perspectives, as well as to identify the specific and major issues that hinder the practice (implementation) of active learning approaches in the classroom. To this end, the researcher found that, both teachers and students practiced different types of active learning methods (ALMs) in low scale. According to the interview, most of the teachers supported active learning approaches, but they did not practiced as it wanted. The observations also strengthen the interview that considerable number of teachers focused on old active learning methods. The researcher also identified some main challenges which were; individual learning styles, lack of resources and heavy teaching loads, chairs in the class are old and crashed, in some schools shortage of references book, plasma and laboratory are not well functional, the curriculum (particularly in mathematics and physics subjects), negative altitude of both teachers and students, bulkiness of the content of text books, Shortage of knowledge about active learning techniques, for some subject it is time consuming and the amount of content that need to be covered.

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References

Bussieres, E.-L., St-Germain, A., Dube, M., & Richard, M.-C. (2017). Efficacite et efficience des programmes de transition a la vie adulte: Une revue systematique [Effectiveness and efficiency of adult transition programs: A systematic review]. *Canadian Psychology/ Psychologie canadienne, 58*(1), 354–365. https://doi.org/10.1037/cap0000104

Alemu, B. M. (2010). Active learning approaches in mathematics education at universities in Oromia, Ethiopia.

Baines, E., Blatchford, P., and Chowne, A. (2007). Improving the effectiveness of collaborative group work in primary schools: Effects on science attainment. *British Educational Research Journal* **33**, 663-680.

Bartle, E. (2015). Experiential learning: an overview. *Institute for Teaching and Learning Innovation. Australia: The University Of Queensland.*

Benson, A., and Blackman, D. (2003). Can research methods ever be interesting? *Active learning in higher education* **4**, 39-55.

Bezabih, M. M. W. (2018). The Effects of Teachers' Perceptions on the Implementations Active Learning in EFL Classroom: The Case of Three Selected Secondary Schools in Dawro Zone, SNNPRS, Ethiopia. *Global Journal of HUMAN-SOCIAL SCIENCE: G Linguistics & Education* **18**, 0975-587X.

Bonwell, C. C., and Eison, J. A. (1991). "Active Learning: Creating Excitement in the Classroom. 1991 ASHE-ERIC Higher Education Reports," ERIC.

Demirci, C. (2017). The Effect of Active Learning Approach on Attitudes of 7th Grade Students. *International Journal of instruction* **10**, 129-144.

Desta, D., Chalchisa, D., Mulat, Y., Berihun, A., and Tesera, A. (2009). Enhancing active learning through self-and-peer reflections: The case of selected schools in Ethiopia. *Journal of international cooperation in education* **12**, 71-87.

Downs, C. T., and Wilson, A.-L. (2015). Shifting to Active Learning: Assessment of a First-Year Biology Course in South Africa. *International Journal of Teaching and Learning in Higher Education* **27**, 261-274.

Edwards, S. (2015). Active learning in the middle grades: This article offers examples of developing students' participation as a central tenet of ideal middle level education that is intellectually active, socially active, and physically active. *Middle School Journal* **46**, 26-32.

Fayombo, G. (2015). Learning styles, teaching strategies and academic achievement among some psychology undergraduates in Barbados. *Caribbean Educational Research Journal* **3**, 46-61.

Gentry, J. W. (1990). What is experiential learning. *Guide to business gaming and experiential learning* **9**, 20.

Gijbels, D., Dochy, F., Van den Bossche, P., and Segers, M. (2005). Effects of problem-based learning: A meta-analysis from the angle of assessment. *Review of educational research* **75**, 27-61.

Ginja, T. G. (2016). Examining practices of active learning approach in Gedeo Zone and Halaba Special Woreda, SNNPR, Ethiopia. *Research on Humanities and Social Sciences* **6**, 1-7.

Gultom, E., and Gurning, B. (2016). The Effect of Brainstorming Teaching Technique on Students' achievement in Writing Narrative Paragraph. *Transform Journal of English Language Teaching and Learning* **3**, 221746.

Joel, M. (2006). Where's the Evidence That Active Learning Works? *Advances in physiology education* **30**, 159-167.

Jürima, R., Kivestu, T., and Steinbach, K. (2016). Possibilities Of Using Active Learning Methods In Secondary Schools' Music Lessons. 259-269.

Kember, D., and Kwan, K.-P. (2000). Lecturers' approaches to teaching and their relationship to conceptions of good teaching. *Instructional science* **28**, 469-490.

Le, H., Janssen, J., and Wubbels, T. (2018). Collaborative learning practices: teacher and student perceived obstacles to effective student collaboration. *Cambridge Journal of Education* **48**, 103-122.

Meyers, C., and Jones, T. B. (1993). "Promoting Active Learning. Strategies for the College Classroom," ERIC.

Niculescu, R. M. (2009). Trying to understand curriculum in the new millennium. *Bulletin of the Transilvania University of Braşov• Vol* **2**, 51.

Omer, M., Dawed, S., and Talema, A. (2020). The Practice and Prospects of Active Learning Methods in Wollo University. *American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS)* **65**, 1-15.

Prince, M. (2004). Does active learning work? A review of the research. *Journal of engineering education* **93**, 223-231.

Takele, M. (2020). Practices and Challenges of Active Learning Methods in Mathematics Classes of Upper Primary Schools. *Journal of Education and Practice* xx.