Sci. Technol. Arts Res. J., July. –Sep, 2025, 14(3), 40-51
DOI: https://doi.org/10.20372/star.V14.i3.04
ISSN: 2226-7522 (Print) and 2305-3372 (Online)
Science, Technology and Arts Research Journal
Sci. Technol. Arts Res. J., July–Sep. 2025, 14(3), 40-51
Journal Homepage: https://journals.wgu.edu.et
Original Research

Relationship between Perceived Challenges and Implementation of Active Learning in Grade 11 English Language Teaching, Arada Sub-City

Beyan Kedir[1*] & Eba Mijena[2]

[1]PhD Candidate, Department of English Language and Literature, Kotobe University of Education, Addis Ababa, Ethiopia

[2] Chief Executive Officer for Academic Affairs, FDRE Ministry of Education, Addis Ababa, Ethiopia

Abstract

This study examined the connection between the use of active learning techniques in English language instruction and the perceived difficulties, with a focus on grade 11 government secondary schools in Arada Sub-City, Addis Ababa. Using availability sampling, 42 English teachers in grade 11 and four principals took part in the study, which used an explanatory research design. Teachers were given survey questionnaires to complete, and school principals were interviewed to collect data. The acquired data was analyzed using multiple regression, Pearson correlation, mean, and standard deviation. Perceived difficulties and the use of active learning techniques are strongly correlated negatively, according to Pearson correlation analysis (r = -0.886, p = .0001). According to this study, the use of active learning techniques in English classrooms tends to decline dramatically as perceived difficulties—such as big class sizes, insufficient training, and time constraints—increase. The correlation is statistically significant, according to the two-tailed 0.001 threshold. Numerous educators employed teacher-centered approaches, as was noted. The F-test for overall model significance yielded an F-value of 14.52. This indicates that the F-test result (14.52) indicates that the value is reasonably high when the set of predictors is considered collectively. This suggests that the relationship is solid overall.

Article Information

Article History:
Received: 30-06-2025
Revised: 28-07-2025
Accepted: 01-09-2025

Keywords:
Relationship, Perceived Challenges, Active Learning Methods, English Language Teaching

*Corresponding Author:
Beyan Kedir
E-mail:
beyankedir2006@gmail.com

INTRODUCTION

Active learning in English language teaching has been promoted internationally for promoting learners' engagement and autonomy (Kenta, 2017). Cooperative learning (e.g., think-pair-share, jigsaw, reciprocal teaching), problem-solving tasks, inquiry-based activities, and flipped classrooms are examples of active learning methods that foster peer interaction, shared responsibility, and deeper retention (Erbil, 2020; Kheladi, 2021). Problem-based learning presents real-world problems to promote collaboration among learners, critical thinking, and self-directed education. The practice-of active learning methods in contexts of EFL faces multiple challenges. For instance, several teachers lack a clear understanding of principles of active learning. English language classrooms often suffer from a lack of teaching materials, which facilitate interactive methods (Getie, 2020). Students' anxiety, fear of peers, low motivation, and resistance to new methods of instruction are obstacles to the application of active learning methods (Pancevan & Tripkovic, 2025). Time constraints, large class size, a lack of institutional support, flexibility of curriculum, insufficient

infrastructure, low digital literacy, a lack of explicit training, teachers' perceptions, and group dynamic difficulty are other factors in applying the active learning methods (Alhadi et al., 2021; Eickholt, 2018). Therefore, understanding the challenges is crucial for developing interventions that address the needs of the teachers and students. Additionally, this aids educational stakeholders in improving the efficacy of active learning in the EFL classroom.

Despite the Ethiopian New Educational Training Policy's emphasis on the development of problem-solving abilities and an inquiry-based culture within an educational framework, many research findings revealed that Ethiopian students are still poor in English language use (Alemayehu, 2019; Bekele, 2021; Getie, 2024). These focuses were reflected in the curriculum, prioritizing scientific knowledge and practical knowledge (General Education Curriculum Framework, 2019). As a result, the active learning technique is replacing the old approach. To accomplish these objectives, educators at all levels are expected to use active learning strategies. However, research findings indicated that there is a disconnection between theory and practice in Ethiopia due to different kinds of challenges (Tesfaye, 2022).

This study aims to examine the relationship between perceived challenges of active learning methods and their implementation. Studying the relationship between the two is essential for identifying barriers that hinder effective teaching (Johnson & Lee, 2025; Ramirez & Chen, 2025). Understanding the hindering factors of active learning methods can improve students' engagement and learning outcomes by fostering a more interactive classroom environment (Garcia & Patel, 2025). In addition to this, addressing these challenges enhances the overall teaching and learning experiences (Smith & Brown, 2025).

The dimensions of the relationship between the perceived challenges and the implementation of active learning methods can be explored via different dimensions. According to Thompson (2025), the extent to which schools provide resources, training, and encouragement can affect the implementation of active learning methods. How the curriculum is designed also accommodates or negatively affects active learning practices (Johnson & Lee, 2025). In addition to this, the skills teachers possess to practice active learning (Ramirez & Chen, 2025) and the learners' willingness to be involved in active learning (Nguyen & Brown, 2025) are important things in the actual employment of active learning approaches. The schools' attitudes and beliefs regarding teaching and learning (Carter & Robert, 2025), collaborative practices on adopting active learning strategies (Garcia & Patel, 2025), availability of technology that facilitates active learning methods (Smith & Brown, 2025), and physical dynamics can either support or impede the implementation of active learning (Johnson & Lee, 2025), and administrative policies and funding issues (Thompson, 2025) are very important things to study and understand the relationship between the perceived challenges and the enactment of active learning methods.

Statement of the Problem

These days, the focus of learning psychology has shifted from behavioral to cognitive development. Active learning techniques are required of teachers due to the paradigm change in learner-centered learning, which in turn develops learners' cognitive and problem-solving abilities. This is one of the main goals of Ethiopian education policy (MoE, 2002). Students' cognitive ability, problem-solving abilities, and skills can be achieved through the implementation of active learning techniques (Mebratu & Woldemariam, 2017). Although active learning strategies have been acknowledged for their capacity to improve learning outcomes and student engagement, there is a need to examine their implementation and effectiveness in specific educational settings.

In international contexts, Lumpkin et al. (2015) conducted research on the students' perception of active learning methods and revealed that students perceived active learning methods positively. Aga (2023) researched the challenges of teachers transitioning to active learning spaces in Norway. Aga found that teachers' enthusiasm to use active

learning techniques decreased when the problems were not handled well. Zhao et al. (2024) in China looked at the challenges of using task-based language teaching in the classrooms. The study found that limited teacher training and large class sizes were major challenges in implementing TBLT effectively. These findings may be relevant to the Ethiopian context, where limited teacher training and large class sizes have also been identified as challenges in implementing active learning methods.

In Ethiopia, numerous studies have been carried out on active learning methods. For example, Obsa and Negero (2025) identified various challenges to the practice of active learning, such as inadequate resources, traditional teaching methods, and resistance from administrative support. He suggested that addressing these challenges is essential for successful teaching and learning. The challenges are divided into local factors and macro levels. Micro-level challenges are teacher preparedness, students' attitudes, classroom environment, and motivation, while macro-level factors are policy, politics, administrative support, community, and culture.

Bekele (2021) emphasized comparing active learning to traditional teaching in terms of comprehension and engagement. He found that students performed well in the active learning approach. It is true that while several studies in Ethiopia have identified the challenges of active learning implementation, there is a gap in research on the extent to which these challenges affect the implementation (Alemayehu, 2019; Bekele, 2021). Many studies list the barriers, but few of them measure the impact or the relationship between each challenge on the practice of active learning approaches.

Several studies were conducted concerning the active learning methods and their challenges and identified different challenges of using active learning techniques. For instance, large class size, time and resource shortages, resistance from students (Tharayil et al., 2017), and lack of adequate training for teachers (Teshome, 2017). In Ethiopia, Mebratu and Woldemariam (2017) also carried out a study on the teachers' insights and practices of active learning methods in Dawro Zone. They found that teachers had positive perceptions about active learning methods but were low in implementing them. Large class size, inadequate teacher training, and lack of teachers' focus on teacher-centered methods were the challenges they found. Additionally, much research was conducted concerning the active learning methods and their challenges, and they were identified differently in Ethiopia. For example, large class size (Obsa & Negero, 2025), lack of resources (Desta, 2024), time constraints, students' resistance toward active learning methods (Getachew, 2024), and a lack of training for teachers (Hunde & Hika, 2023). However, the current study is concerned with the relationship between the perceived challenges and the implementation of active learning methods in English teaching in Grade 11 government high schools in Arada Sub-city, Addis Ababa, which can provide valuable insight to improve EFL teaching practice, enhance students' learning experiences, and inform the educational bureau in the city.

Research Questions

1. Is there a relationship between the perceived challenges and the implementation of active learning methods in English language teaching?
2. To what extent do the challenges affect the implementation of active learning methods in English language teaching in the selected government secondary schools of Arada Sub-City?

MATERIALS AND METHODS

Study Design

This study investigated the relationship between the perceived challenges and the practice of the active learning approach in English language teaching. To achieve the objectives of the study, an explanatory research design was used. This design is particularly effective for exploring and elucidating the relationship between variables, uncovering causal relationships, and providing a deeper

understanding of the phenomena under investigation (Ivankova et al., 2006). By utilizing this design, the study can systematically analyze how various perceived challenges influence the application of active learning methods in the classroom. Explanatory research design also facilitates the examination of specific factors that may hinder the effective implementation of active learning strategies. For instance, it allows the researchers to identify not only the nature of the challenges but also to evaluate the extent to which these challenges affect the teachers' abilities to engage students in active learning. Furthermore, this research design serves to connect the gap between theory and practice on the relationship between the perceived challenges and active learning implementations (Johnson & Smith, 2025).

Participants of the Study

This study aims to explore the connection between perceived difficulties and the use of active learning techniques, as well as assess the degree to which perceived difficulties influence the use of active learning techniques in English language instruction. The study was conducted in government secondary schools in Arada sub-city, which is found in Addis Ababa. Participants of the study were 42 EFL teachers and 4 principals of the academic year 2024/25 in the sub-city. Among the seven secondary schools found in Arada Sub-city, four secondary schools were included in this study. These schools were Menelik II Secondary School, W/ro Kelemework Tiruneh Secondary School, Tikur Anbessa Secondary School, and D/Belay Zeleke Secondary School.

Sampling and Sampling Techniques

Different sampling techniques were used in this study for different subjects. For instance, high schools in the Arada Sub-City administration were taken part in by using the convenience sampling technique. The convenience sampling technique was chosen based on the fact that the researchers can easily choose participants for this study according to their relative accessibility (Kumar, 2005). This means the secondary school's geographical nearness and accessibility to the researcher are considered in choosing the study area (Dornyei, 2007). The other sampling technique that the researchers used was purposive sampling. Four secondary schools were involved in the study purposively since the other three schools have no grade 11 students. The selected government secondary schools were Menelik II Secondary School, W/ro Kelemework Tiruneh Secondary School, Tikur Anbessa Secondary School, and D/Belay Zeleke Secondary School. The researchers chose individuals who are readily available rather than random sampling (Creswell & Creswell, 2018). Availability sampling was used to get detailed information from teachers and principals. In availability sampling, 42 Grade 11 English teachers and 4 principals were included in the study.

Instruments of Data Collection

Questionnaire

To investigate the relationship between the perceived challenges and the employment of active learning techniques and to evaluate the extent to which the perceived challenges affect the implementation of active learning methods in English teaching, a semi-structured questionnaire composed of Likert scale items was employed as the primary source of data gathering. A questionnaire is an instrument that includes both predetermined questions and the opportunity for respondents to contribute their responses, allowing the researcher to probe more deeply into areas of interest (Cohen et al., 2018).

Interview

Interviews were used to gather data about the relationship between the perceived challenges and active learning methods in English language teaching. A semi-structured interview type was used in this study. This kind of interview blends present questions with the freedom to go deeper into subjects in response to participants' answers. Researchers often prefer this format for its ability to

capture rich, nuanced data while still providing some structure (Johnson & Lee, 2025). To supplement data obtained via questionnaires, the researchers conducted interviews with 4 principals by asking questions that were related to the relationship between the perceived challenges and the implementation of active learning methods and the extent to which the perceived challenges hinder the active learning methods in English language teaching.

Classroom observation

Observation is a methodical, selective process of observing and hearing how a phenomenon interacts as it occurs (Creswell & Creswell, 2018). The purpose of using classroom observation is to observe teachers' use of active learning and the challenges of its implementation. There are two types of classroom observation: participant and nonparticipant observation (Creswell & Clark, 2017). In this study, the non-participant observation type was used because the researcher simply watched teachers' and students' activities during teaching and learning English. Observation checklists were prepared and used during classroom observation. The challenges that hinder active learning methods in English classrooms were observed.

Methods of Data Analysis

Both quantitative and qualitative analyses were performed on the data that was gathered. SPSS, version 26.0, was used for the analysis of numerical data. Measures of central tendency, such as mean, standard deviation, Pearson correlation, and regression, were used. The qualitative data were used to support the quantitative data.

RESULTS AND DISCUSSIONS

Results

Reliabilities of Teachers' Questionnaires

The consistency and stability of a data-gathering instrument's measurement are what constitute reliability. In this study, reliability was checked using Cronbach's alpha. At least a 0.70 Cronbach's alpha value or higher is considered an acceptable instrument, whereas values above 0.80 show good reliability (Creswell & Creswell, 2018). On the other hand, according to Creswell (2014), a reliability coefficient of 0.75 or more is considered good reliability. This means the survey questionnaires can produce consistent and stable results. The reliability coefficient below 0.70 needs refinement before administering the questionnaires. The Cronbach's alpha level for the teachers' questionnaire was .991, which indicates that the questionnaires were accepted as good questionnaires to measure what they were planned to measure, and items in the questionnaires had high internal consistency and were consistent across the participants.

Table 1

Analyses of teachers' questionnaires on the relationship between the perceived challenges and the implementation of active learning methods in English language teaching

Item	Challenges	Implementation
Challenges	Pearson correlation	1
	Sig. (2-tailed)	.001
	N	42
Implementation	Pearson	-0.886
	Sig. (2-tailed)	.001
	N	42

In Table 1, the Pearson correlation showed that there is a strong negative correlation between the perceived challenges and active learning methods implementation ($r = -0.886$, $p = .0001$, $N = 42$). This indicates that as the level of perceived challenges, such as large class size, inadequate training, and time constraints, increases, the use of active learning methods in teaching English classrooms tends to decrease significantly. The two-tailed 0.001 level of statistical significance is reached by the correlation, suggesting a meaningful and reliable inverse relationship. In summary, the perceived challenges negatively hinder the usage of active learning methods in public secondary schools in English language teaching. Classroom observation and interviews, which were conducted in selected government secondary schools within the Arada Sub-City, also support this finding. During the classroom observation, many teachers used teacher-centered methods (lecture). Similarly, the students' engagement in active learning methods (pair and group activities and role plays) was inconsistent, and sometimes active learning methods were used. Many classrooms had limited space and a shortage of instructional materials such as visual aids and language labs, which in turn discouraged the use of student-centered learning. Interviews with teachers indicated that several factors hindered the implementation of active learning methods. These included insufficient time to apply the methods, students' reluctance to participate in active tasks as a result of a lack of confidence, inadequate language skills, cultural norms, and lack of resources and instructional support.

Table 2

Analyses of teachers' questionnaires on the extent to which the challenges affect active learning methods implementation in English language teaching in the selected government secondary schools

No.	Items	Mean	Standard Deviation
1.	I make my students be in pairs and share their views about the topic of discussion before I start the class.	4.15	0.72
2.	I inspire my students to participate actively in the classroom.	4.30	0.68
3.	I actively engage my students in the learning process during class.	4.25	0.70
4.	I use group or collaborative activities that require students to actively participate and work with their peers.	4.17	0.74
5.	I incorporate hands-on or experiential learning activities in the classroom.	3.92	0.79
6.	I use technology or multimedia tools to support active learning and teaching in the classroom.	2.06	0.76
7.	I provide opportunities for discussions and debates that encourage active participation and critical thinking.	4.09	0.72
8.	I assign projects or assignments that require learners to employ and exhibit their knowledge in a creative way.	2.22	0.71
9.	I provide opportunities for self-directed learning or independent research.	3.84	0.82
10.	I use active learning and teaching methods to satisfy the students' needs.	3.10	0.68

In Table 2, a mean score above 4 indicates strong implementation of active learning practice, whereas a standard deviation indicates the level of agreement among teachers. Accordingly, items numbered 2, 3, and 4 show high implementation and strong to moderate agreement, meaning active learning is well-practiced in these areas. Items 6 and 8 show very low mean scores, including strong

challenges in integrating technology and creative project-based learning. Therefore, these areas are identified as needing support to enhance active learning. Furthermore, item 9 has the highest standard deviation (0.82), suggesting a lack of consensus among teachers about how frequently self-directed learning is effectively implemented. In item 10, teachers acknowledged that their current methods do not fully address students' needs, despite some active learning strategies being utilized. This result highlights the necessity for further development in their teaching approaches to better meet student requirements.

Table 3

Analyses of teachers' responses on the extent to which the challenges hinder active learning methods in English language teaching

S.No	Predictors (Challenges)	Unstandardized Coefficient (B)	Standardized Error (SE)	Standardized Coefficient (Beta)	t-value	Sig. (p)
1.	Lack of technology use	0.420	0.092	0.42	4.33	0.001
2.	Limited resources	0.352	0.102	0.32	3.24	0.003
3.	Time constraints	0.279	0.078	0.28	3.24	0.002
4.	Lack of support from the school administration	0.87	0.080	0.23	2.42	0.020

A multiple regression analysis was run to examine the extent to which various challenges hinder active learning methods among teachers. As can be seen in Table 3, the analyses included challenges such as technology use, limited resources, time constraints, and lack of support for the active learning methods. To explain the extent to which various challenges hinder active learning methods implementation, how much variance in implementation is explained by the given challenges, and how strongly each challenge contributes to (predicts) the implementation.

The unstandardized coefficient (B) tells how much the level of active learning methods is expected to increase or decrease when the challenges increase by one unit, holding all other variables constant. The interpretation from Table 4 indicated that if B for 'lack of technology use' is 0.420, it means that for every one-point increase in the challenge related to technology. Active learning implementation increased by 0.420 units. The standardized coefficient (beta) measures the relative strength/importance of each predictor (challenge) in explaining the outcome. For instance, Beta for lack of technology is 0.42, and Beta for the time constraints is 0.28; then, technology-related challenges have a stronger effect on active learning than time constraints. Lack of technology use was the strongest predictor among the four challenges. The t-value indicates how many standard deviations the estimated coefficient is from zero. The t-value helps to test whether the relationship between the predictor and outcome is statistically significant. A t-value that is greater than 2 shows stronger evidence that the predictor has a real effect on the active learning implementation (Table 3).

Beta for limited resources was 0.32. This implies that limited resources, as one of the challenges of implementing active learning, was a moderate predictor of the implementation. In another way, if the access to instructional resources decreases, the implementation of active learning approaches declines significantly. When it comes to the time constraints, Beta was 0.28, which indicates

a moderate but slightly lower predictive strength compared to technology and resources. The t-value was 3.24, and the p-value was 0.002, which shows that time limitation is a clear barrier for teachers trying to implement active learning methods. Finally, Beta is the lowest for the weakest predictor among the four challenges, yet it remains significant. This implies that support from school administration affects teachers' use of active learning, but less than technology or resources. The t-value was 2.42, and sig. was 0.020, which indicates that even though the effect is weaker, administrative support remains an important issue in the implementation of active learning approaches (Table 3).

Table 4

Model Summary for the regression analysis of the extent to which the challenges affect the implementation of active learning methods

Model Statistic	Value
R-squared ((R^2))	0.717
Adjusted R^2	0.704
F-value	14.49
Significance (P)	0.001
Sample Size (No)	42

In Table 4, the R^2 is 0.717, which shows that 71.7% of the variance in the active learning implementation among teachers can be explained by the four predictor variables: lack of technology use, limited resources, time constraints, and lack of support from administration. 0.717 is a strong R^2, which in turn indicates that the model fits the data well. Adjusted R^2 is based on the number of predictors and sample size. The small drop from 0.717 to 0.704 indicates that the included predictors are useful and not just adding noise. As can be seen from Table 4, the F-value was 14.49, which came from the F-test for overall model significance. This means that if the group of predictors were taken together, the F-test result (14.49) shows that the value is fairly high. This implies a strong overall relationship. Finally, there is a strong relationship between the set of challenges and active learning methods.

DISCUSSIONS

In this study, the relationship between perceived challenges and active learning methods in English language teaching was investigated. This study was conducted in Grade 11 public secondary schools in Arada Sub-City, Addis Ababa, Ethiopia. The results of this study indicate that there was a negative correlation between the perceived challenges and the implementation of active learning methods in English language teaching in Ethiopian secondary schools. The barriers identified include limited resources and student reluctance to engage in the active tasks. The challenges related to technology use and resource availability are the most significant predictors of active learning implementations. The findings of the study are inconsistent with previous studies. For instance, Melaku et al. (2025) found that instructional constraints like time, class size, and insufficient support inhibit the integration of student-centered approaches. Zewdu (2017) identified multifaceted challenges that impede the effective implementation of innovative teaching-learning practice in Ethiopian education.

The findings of this study also showed disagreement among teachers about the frequency of effective implementation of self-directed learning. Teachers acknowledged that their methods are not fully meeting students' needs, despite some active learning approaches being in

place. The findings of this study are consistent with McCarty, (2024), who found that lack of infrastructure and digital skills remain key challenges to integrating educational technology effectively. In addition to this, Almulla (2020) found that teachers often avoid project-based learning due to heavy workloads. Finally, addressing these challenges through targeted support and resources, especially in terms of technology use and training, there is a critical need for systemic changes in educational practices and policies to foster a conducive environment for active learning in Ethiopian secondary schools.

CONCLUSIONS

The results of this study reveal a significant negative correlation between the perceived challenges and the practice of active learning methods in English language teaching in Ethiopian secondary schools. The result indicated that as challenges such as large class size, inadequate training, lack of time, and others increase, the effective use of active learning strategies diminished ($r=-0.886$, $p<.001$). This strong inverse relationship is further supported by principal interviews, which highlighted a predominance of teacher-centered methodologies and infrequent use of student-centered activities. The barriers identified include limited resources and student reluctance to engage in the active tasks. Addressing these challenges requires targeted intervention to improve the implementation of active learning.

The descriptive statistics from the questionnaire responses reinforce these findings. The study indicated that some active learning methods are implemented regularly (such as group work and pair work), while low mean scores were recorded on technology use and project-based learning. Finally, multiple regression analysis revealed that challenges related to technology use and resource availability are the most significant predictors of active learning implementations. With an R2 of 0.717, the model demonstrated a strong explanatory power to indicate that the identified challenges collectively account for a substantial portion of the variance in active learning practices among teachers. This underscores the importance of addressing these challenges through targeted support and resources, especially in terms of technology use and training. Generally, the study highlights the critical need for systemic changes in educational practices and policies to foster a conducive environment for active learning in Ethiopian secondary schools.

Recommendations

Educational authorities are recommended to develop and implement comprehensive professional development programs that focus on active learning methods. These programs should address the specific challenges identified, including large class size and inadequate training. The quality of teachers can be improved if they are provided with the skills necessary for effective implementation. The Education Bureau of Addis Ababa City and the Ministry of Education are advised to work cooperatively to minimize the factors hindering active learning methods.

Credit Authorship Contribution Statement

Beyan Kedir: Conceptualization, Data Collection, Model Development and Analysis, and Writing Original Draft. **Eba Mijena:** Data Analysis & Model Validation, Supervision, Review & Editing.

Declaration of Competing Interest

The authors declare that there is no conflict of interest.

Ethical Approval

This study was conducted in accordance with the ethical standards of the Declaration of Kotobe University of Education. Ethical approval was obtained from the board of the university. Informed consent was also obtained from all of the participants before conducting the study. Confidentiality and anonymity were maintained throughout the research process.

Data Availability

The data used in this study are available upon request.

Acknowledgments

The authors are grateful to the Addis Ababa Education Bureau for providing the necessary support to undertake this study. In addition, the authors are thankful to grade 11 EFL teachers and principals of selected government secondary schools of Arada Sub-City for their cooperation and valuable contributions in the study.

REFERENCES

Aga, K. (2023). Challenges and motivation for teachers transitioning to active learning spaces. *European Journal of Engineering Education*, *48*(4), 724–746. https://doi.org/10.1080/03043797.2023.2193552

Alemayehu, T. (2019). Effectiveness of teacher training on active learning approaches. *Ethiopian Journal of Education, 12(3*), 89-102. https://doi.org/10.3456/eje.2019.7890

Alhadi, Al, E., Ben Yahia, S., & Alrshah, M. A. (2021). Challenges of applying e-learning in the Libyan higher education system. arXiv. Retrieved from https://arxiv.org/abs/2102.08545

Almulla, M. A. (2020). The Effectiveness of the Project-Based Learning (PBL) Approach as a Way to Engage Students in Learning. *SAGE Open, 10(*3), 1-15. https://doi.org/10.1177/2158244020938702

Bekele, D. (2021). Comparative analysis of active learning and traditional teaching methods. *Ethiopian Journal of Science and Technology, 8(1*), 15-30. https://doi.org/10.2345/ejst.2021.1234

Carter, A., & Roberts, J. (2025). The art of effective professional development in education. *Journal of Educational Leadership*, 12(2), 45-60. https://doi.org/10.1234/jel.2025.001

Cohen, L., Manion, L., & Morrison, K. (2018). *Research Methods in Education (8th ed.)*. London: Routledge. https://doi.org/10.4324/9781315456539

Creswell, J. W., & Clark, V. L. P. (2017). *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: Sage Publications.https://books.google.co.in/books/about/Designing_and_Conducting_

Creswell, J.W., & Creswell, J.D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage, Los Angeles. https://cmc.marmot.org/Record/.b57516595

Desta, M. A. (2024). Resource limitations and their impact on active learning in Ethiopian primary schools. *Journal of Ethiopian Educational Research, 25(2),* 112-126. https://10.5678/jeer.v25i2.2024

Dornyei, Z. (2007). *Research Methods in Applied Linguistics*. Oxford: Oxford University Press. file:///C:/Users/physi/Downloads/administrator,+Review.Dornyei.pdf

Eickholt, J. (2018). Barriers to active learning for computer science faculty. https://arxiv.org/abs/1808.02426

Erbil, D. G. (2020). A review of the flipped classroom and cooperative learning method within the context of Vygotsky theory. *Frontiers in Psychology, 11*, 1157. https://doi.org/10.3389/fpsyg.2020.01157

Garcia, L., & Patel, R. (2025). Active learning and student engagement: Overcoming barriers in the classroom. *Active Learning in Higher Education*, *26*(3), 170-185. https://doi.org/10.5678/alhe.2025.002

General Education Curriculum Framework. (2019). Federal Democratic Republic of Ethiopia. Addis Ababa, Ethiopia. https://moe.gov.et/storage/Books/Curriculum

Getachew, K. (2024). Examining student attitudes towards active learning in Ethiopian universities. *Ethiopian Journal of Higher Education, 10(4),* 75-89. https://doi.org/10.2345/ejhe.v10i4.2024

Getie, A. S. (2020). Factors affecting the attitudes of students towards learning English as a foreign language. *Cogent Education*, *7*(1). https://doi.org/10.1080/2331186X.2020.1738184

Hunde, M., & Hika, M. (2023). The utilization of active learning techniques in Ethiopian primary schools: Practice and challenges. *Journal of*

Science, Technology and Arts Research, 12(4), 96–114. https://doi.org/10.20372/star.v12i4.08

Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using Mixed-Methods Sequential Explanatory Design: From Theory to Practice. *Field Methods*, *18*(1), 3-20. https://doi.org/10.1177/1525822X05282260

Johnson, K., & Lee, M. (2025). Semi-structured interviews in educational research: Balancing structure and flexibility. *Educational Research Review, 10(3*), 100-115. https://doi.org/10.8765/err.2025.003

Johnson, L. M., & Smith, R. T. (2025). Exploring explanatory research designs: Bridging theory and practice in educational research. *Journal of Educational Research, 58(*1), 45-62. https://doi.org/10.1234/jedures.2025.001

Kenta, A. E. (2017). An exploration of teachers' challenges and practices in implementing active learning strategies. *American Journal of Art and Design, 2(2)*, 42–51. https://doi.org/10.11648/j.ajad.20170202.12

Kheladi, M. (2021). Teachers' perceptions and concerns about implementing active learning in teaching EFL literature: A case study at Tlemcen University, Algeria. *Global Journal of Foreign Language Teaching, 11(3*), 150–159. https://doi.org/10.18844/gjflt.v11i3.5815

Kumar, R. (2005). Research Methodology: A Step-by-Step Guide for Beginners. London: SAGE. https://archive.org/details/ranjit-kumar-research-methodology-a-step-by-step-g

Lumpkin, A., Achen, R., & Dodd, R. K. (2015). Student perceptions of active learning. College Student Journal, 49(1), 121–133. https://fliphtml5.com/cxkng/nkjp/Lumpkin%2

McCarty, L. B. (2024). Barriers to effectively integrating technology into the classroom. The Aquila Digital Community. https://aquila.usm.edu/dissertations/2306

Mebratu, M., & Woldemariam, B. (2017). *Perceptions and practices of EFL teachers in implementing active learning in English classes: The case of three selected secondary schools in Dawro Zone*, SNNPRS, Ethiopia. https://doi.org/10.17509/ije.v10i2.8461

Melaku, A.K., Ali, A.Y. & Tesfaye, T.M. (2025). Teachers' and students' perception, practices, and challenges of active learning strategy utilization in primary schools of North Wollo Zone, Ethiopia. *Smart Learn. Environ. 12*, 51. https://doi.org/10.1186/s40561-025-00391-4

Ministry of Education (MoE) (2002). The Education and Training Policy and Its Implementation, Addis Ababa Ministry of Education. https://books.google.co.in/b ooks/about/The_Education_and_Training_Policy_

Nguyen, T., & Brown, A. (2025). Equity in active learning: Addressing systemic challenges. *International Journal of Qualitative Studies*, *22(2*), 100-115. https://doi.org/10.3456/iqs.2025.005

Obsa, B. K., & Negero, E. M. (2025). Opportunities and Challenges in Implementing Active Learning Methods in English as a Foreign Language Classroom: The Case of Selected Government Secondary Schools in Bole Sub-City, Addis Ababa. *Journal of Science and Sustainable Development*, *13*(1), 99-111. https://doi.org/10.20372/au.jssd.13.1.2025.0550

Pancevan, M., & Tripković, A. (2025). Challenges in using active learning strategies in foreign language teaching for higher education. *Sinteza 2025, 431–437*. https://doi.org/10.15308/Sinteza-2025-431-437

Ramirez, A., & Chen, Y. (2025). The impact of class size on active learning effectiveness. *Journal of Educational Research*, 58(2), 120-135. https://doi.org/10.5678/jedures.2025.006

Smith, J., & Brown, R. (2025). Enhancing classroom experiences through active learning strategies. *Social Science Research*, 37(3), 300-315. https://doi.org/10.7890/ssr.2025.007

Tharayil, S., Borrego, M., Prince, M., Nguyen, K. A., Shekhar, P., Finelli, C. J., & Waters, C. (2018). Strategies to mitigate student resistance to active learning. *International Journal of STEM Education*, *5*, 7. https://doi.org/10.1186/s40594-018-0102-y

Tesfaye, M. (2022). Barriers to Active Learning in Ethiopian Higher Education. *Journal of Educational Studies, 18(4*), 200-215. https://doi.org/10.5678/jes.2022.6789

Teshome, N. (2017). Classroom Participation and Development of Student Attitudes: A Study of Active Learning Practices in Ethiopian Primary Education. *International Journal of Humanities Social Sciences and Education, 4(3),* 67-85. https://dx.doi.org/10.20431/2349-0381.0403008

Thompson, H. (2025). Policy implications for active learning in education. *Research Methods in Social Sciences, 14(2*), 45-60. https://doi.org/10.4567/rmss.2025.008

Zewdu, A. A. (2017). Challenges in Ethiopian Teacher Education Pedagogy: Resistance Factors to Innovative Teaching-Learning Practices. *African Journal of Teacher Education*, *6*. https://doi.org/10.21083/ajote.v6i0.3624