
Increasing Student Motivation for Speaking Skills with MALL (Mobile-Assisted Language Learning)

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Abstract

MALL (mobile-assisted language learning) was implemented in order to raise pupils' grades, especially in English-speaking classes. Microsite was used to assist students in accessing learning materials. The study was carried out at one of Batam's secondary schools. Students in grade 10 of the second semester at one public high school were the subject of this study. The researchers as teachers would observe 50 science students through the evaluation in English class. To acquire data, the researchers compared pre-test and post-test results, and found out whether the strategy was successful in enhancing students' speaking abilities. Classroom action research (CAR) was applied to solve the issue in the class. The information was obtained in four steps: planning, acting, observing, and reflecting. The results revealed the speaking abilities of students have improved between pre-tests and post-tests. Students received a score of 59.56 for the average score of pre-tests and were categorized poorly. After implementing MALL (mobile-assisted language learning) activities, the average grades of the students increased. Post-tests gained 65.47 with a great improvement in several aspects such as pronunciation was 10.14% and followed by fluency was 6,3% improvement. The evidence indicates that students responded positively to the MALL (mobile-assisted language learning) method particularly when using Microsite. The findings concluded that students' enthusiasm to learn English has been enhanced by MALL (mobile-assisted language learning), which has also boosted their speaking abilities.

Keywords: Mobile-Assisted Language Learning, Speaking Skill, Student Motivation, Microsite.



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1. Introduction

Technology advances have affected all aspects of human life including education. Innovation was created to provide positive benefits to human life. (Eryansyah et al., 2019) argued that Technology in education has changed a lot, digital technology has taken the role of older devices, such as mp3 players replacing tape cassettes, mp4 players replacing videotapes, and smart boards replacing blackboards and whiteboards. Communication between teachers and students can occur anytime through an application.

Technology has made it easier for teachers to deliver teaching materials and students can easily access them. (Ali & Maksum, 2020) believed that the use of ICT in learning is an effective and efficient way to convey learning materials and communicate with each other. Technology has forced teachers to be more creative in how they use it. Teachers now have a wide range of digital tools at their disposal to create and present multimedia presentations, visual resources, and end-user software that facilitates new teaching and learning techniques (Situjuh, 2019)

Based on the researchers' previous teaching expertise at one of Batam's public high schools, has found a problem faced by students. It was apparent throughout the observation that students were unable to obtain materials since the total of books provided was limited. Students had a miscommunication and lose their motivation to learn English. They were easily distracted by their partner sharing books during the learning process in the class. Consequently, they were unconcerned about the lesson and their grades in speaking class were unsatisfactory. Besides, researchers found through classroom observations that students speaking skills were very poor. Most of them cannot pronounce several easy words in English correctly. According to (Ramadan et al., 2023), Interactive multimedia is a deep solution to simplify learning material compared to monotonous textbooks/e-books.

In this case, MALL (mobile-assisted language learning) can be utilized to assist students in identifying a solution. (Sherine et al., 2020) claimed that among all portable technology, mobile phones were found to be the most popular (67%) for language learning. The study proved that WhatsApps group interaction impacted IELTS participants's speaking skills in several aspects such Fluency and Coherence, Lexical resource, Grammatical accuracy, and Pronunciation. Another study from (Ahmed et al., 2022) that used WhatsApp and Duolingo as media implementing MALL (mobile-assisted language learning) to Iranian EFL learners. The purpose of the study was to examine the effectiveness of strategies to developed speaking skills by comparing MALL (Mobile-Assisted Language Learning) with conventional

learning. Results have shown that the group which used WhatsApp and Duolingo had better performance than group of conventional learning. (Budiawan et al., 2019) conducted study and discovered that learning through Cleverbot can facilitate students and increase student enthusiasm for learning at SMA Budhi Warman II. In China, MALL (mobile-assisted language learning) strategy has been carried out (Li, 2022) to examine the effectiveness and limitation of the IELTS Liulishuo application in improving students' speaking skills. The results showed positive effects through oral Assessment with automatic speech recognition (ASR) system could improve students' speaking skills among Chinese university students. In addition, the implementation of MALL (mobile-assisted language learning) in the same country was also conducted by (Xu, 2020) which supported the researcher to teach listening and speaking course to EFL college students using the Keke application. However, this only affected listening abilities, not speaking ability.

From the above studies, it is clear that the media used in MALL (mobile-assisted language learning) have both positive and negative effects on improving students' speaking skills. However, researchers desired to attempt another media for teaching in the class, so the Microsite was chosen to provide the learning material to the students in the speaking class. The researchers expected that Microsite would not only assist students in accessing learning material but also improve their speaking scores. The researchers will design an attractive Microsite to catch their interest in learning English.

The study aims to examine whether the strategy can help students to improve their speaking skills. The researchers also want to investigate the strategy is effective to enhance students' motivation to learn English.

2. Literature Review

2.1. Skills for communication (speaking skills)

Speaking is one of the most important abilities for EFL students to develop. (Gultom et al., 2022) stated that this skill was used to measure the success of learners in learning foreign languages. There are two main components in speaking: accuracy and fluency (Ahmed et al., 2022). Accuracy was defined as "error-free" communication. This means that grammatical is concerned to measure accuracy then Fluency produces words in real time without needless pausing or hesitation.

Suvarnaphaet and Suvarnaphaet (2023) supposed that speaking as a key communicative skill has essential aspects that must be considered by the teacher. The first aspect is vocabulary which is described as a collection of words. The correct use of vocabulary avoids confusion during a conversation. The second is grammar, which is a collection of rules that manage how words are organized and linked in phrases and sentences. The third aspect is pronunciation, which refers to the process of correctly pronouncing a word. It includes the production of unique sounds such as aspiration, voicing, voice sets, intonation, and stress.

Fluency is the fourth aspect, which defines as the capacity to communicate at an effective speed, smoothly, and with correct words without having to think hard. The final aspect is precision. The aspect also can be defined as word order which relates to word understanding, correct grammar and structure, the excellent scope of the meaning and message of language, and the avoidance of mistakes.

2.2. Students Motivation

Students are motivated by things that motivate them to achieve their goals. (Septian & Simaibang, 2023) mentioned that motivation was what drives people to behave. Simaibang described motivation as the process of starting, directing, and upholding actions that are focused on goals. This means that Students' motivation is the willingness of students to take part in the learning process.

Pranawengtias (2022) elaborated on factors of motivation. It was classified into Intrinsic and extrinsic factors of motivation.

1. Intrinsic Motivation

a. The initial motivation to learn

Students desired to learn for increasing their knowledge.

b. Future goals

Awareness to get a decent career and have an impact on future employment, made students motivated to learn.

2. Extrinsic Motivation

a. Reward or punishment

The existence of gifts or rewards to students was one of the efforts to increase the willingness to do something. Similar to rewards, the existence of punishment in the learning process gave an impact on students' learning motivation.

b. Lecturer Quality

The quality of the lecturers was defined as the way the lecturers teach and the strategies used by the lecturers. It would attract students' interest to learn.

c. Learning Support Facilities

Learning support facilities such as classes and a comfortable campus atmosphere and study partners could provide motivation for learning.

2.3. MALL (mobile-assisted language learning) to improve Speaking skills

Speaking is one of the difficult language skills that challenge most EFL students. It includes of accuracy and fluency to ensure the listener can understand the meaning was spoken (Ahmed et al., 2022; Jaelani & Adung, 2022). However, most EFL students are taught using traditional teaching methods that centered around textbooks and assignments, so they have

limited exposure to English as they learn and speak real English daily and decrease motivation in learning (Li, 2022).

MALL is suggested to improve students speaking skills and have positive impacts on aspects of speaking after being treated using the strategy (Setiyanti et al., 2022). It can motivate students, alters their perspective, and encourages active participants in class activities (Murugan & Teoh, 2022). MALL has the opportunity to engage in real-world learning activities by overcoming the constraints of conventional classroom instructions (Karunasri et al., 2022). MALL (mobile-assisted language learning) refers to a subset of recent technological breakthroughs in language acquisition. MALL stands for mobile-assisted language learning, which involves the use of cell phones to carry out language activities at any place and at any time (Ahmed et al., 2022). The primary components of the strategy are mobile devices with two leading features: portability and connectivity. In contrast to CALL, MALL surpassing it interaction and mobility to enable students learning whenever and wherever they want because it is accessible and inexpensive. Teachers can contact students at any time to track their learning progress and provide relevant tutorials if needed (Lu, 2022).

2.4. MALL (mobile-assisted language learning) using Microsite

Microsite is a small web page that is separate from the main website where some links can be loaded onto the Microsite and form a mini website. It is used to make some link can be launched on one site, so it is simple and easier to access (Arifiyanto et al., 2019). Microsite development has a goal to express creative ideas without limits as entertainment but also educational by combining with other media (Mustaqimah et al., 2023).

Wibowo (2023) discovered that the Microsite could be designed as a learning material for independent media. Microsite also assisted the teacher to provide materials in form of interactive learning media that were delivered online and supported by a variety of devices including smartphones, gadgets, and others. Microsite can assist teachers conveyed learning materials through a link that easier for students to access them because consists of links that are gathered and created into an accessible connection (Pebiana & Pratiwi, 2023). It offers a simple and comprehensive solution to easily create a Microsite for bio links (Elvyra & Zaki, 2023).

3. Method

CAR stands for classroom action research that was applied to the investigation. According to (Garpersz & Uktolseja, 2020), classroom action research (CAR) is an essential component of scientific study since it determines the precision of outcomes. It was effective research through specific actions targeted at enhancing professional classroom practices. By solving

students' speaking problems, the researchers planned to employ classroom action research to help students improve their public speaking abilities.

3.1. Participants

The research investigation was carried out in one of Batam's public high schools. Additionally, the institution would provide internships for the researcher. The researchers selected one of the science classes in grade 10 as the target of this investigation. The research engaged 50 students inside the room to gain data for the research. The researchers chose this grade because the researchers would have conducted an internship from the beginning of the 2nd semester and taught 10th grade majoring in science.

3.2. Instrument

In order to obtain the valid data for the study, the researcher would have conducted Pre-test and Post-test to determine whether the MALL (mobile-assisted language learning) is effective to develop students' speaking skills. The researchers compared pre-tests and post-test scores to determine if the strategy give impacts to their speaking abilities. The pre-test is the previous data used before conducting the strategy, so the researchers would have explained to students for the materials of Chapter 2. Students were taught using the strategy from the English teacher in the school which is focused on the textbook. The activities took around 2 meetings and Pre-test was conducted at the end of the meetings. The Pre-test data were obtained through students' assessments to interview their partners.

Furthermore, the researchers continued the lessons for Chapter 3 and applied MALL (mobile-assisted language learning) strategy in the class. All of learning materials would have been provided in the Microsite. Researchers prepared quizzes and games for learning to exercise and tested students' comprehension of the materials that had been explained. It aims to engaged students to the learning process and motivated them to learn English. Chapter 3 was arranged for 4 meetings, the researchers taught students about the topic Recount for three meetings and then assessed them to collect Post-test data. Students were assigned to speak about their experiences in the past. Post-test is the final data to be compared with previous data and determined the findings.

3.3. Data Analysis Procedure

The study adopted the action research model's four-part cycle from (Marsevani & Habeebanisya, 2022), which used classroom action research (CAR) including planning, acting, observing, and reflecting as the steps. Planning involved developing a teaching design that was used to facilitate learning. In this section, the researcher observed the class in a week to identify students learning behaviors then decided the suitable learning strategies, prepared teaching materials, and planned assessment criteria. After all activities of planning were done, the researchers took Action step to implement planning designs to the class. The researchers acted as English teachers in the class following the design of the lesson plan.

before integrated the MALL, the researchers conducted Pre-test to evaluate prior students' speaking skills. It aimed to determine the effectiveness of strategy through a comparison between Pre-test and Post-test. Pre-test was held before explained the materials of Chapter 2 about interview. They were asked to interview their partner regarding past experiences and then displayed them in front of the class.

Thenceforth, MALL (mobile-assisted language learning) strategy was employed along with teaching activities in the class. Researchers used Microsite to deliver the learning material and provided assignments. These activities took 3 meetings and eventually Post-test was conducted at the last meeting of chapter 3. The researcher evaluated students speaking skills through an assignment making a Recount story based on self-experiences. Observation was the step of paying attention to events in the classroom and interactions in the class. The researchers who taught speaking using MALL (mobile-assisted language learning) studied students' behaviors during the learning process to consider the impact of MALL enhancing students' motivation.

Furthermore, reflection was an activity to analyze students' scores in speaking tests conducted at the end of these studies. The results of this reflection were used as a basis for consideration to revise the strategy that would be applied in the next cycle if problems need to be solved. The data would be compared to the average scores of the pre-tests and post-tests that utilized the technique in order to determine the results. The following scoring rubric would be used for the test:

Table 1. The Rubric of Students' Speaking Skill

Speaking Aspects	Very Poor 10-40	Poor 41-59	Quite Good 60-70	Good 71-80	Very good 81-100
Pronunciation	No Correct Pronunciation	Makes a lot of mistakes in pronunciation	Makes various errors during the conversation	Makes a few mistakes in conversation	No mistakes in the conversation
Fluency	No speaking provides the desired results.	Doesn't communicate clearly and speaks too slowly	Fluently speaks, although can be a little jumpy.	Fluently, but occasionally with a brief delay	Sounds quite clearly

Speaking Aspects	Very Poor 10-40	Poor 41-59	Quite Good 60-70	Good 71-80	Very good 81-100
Vocabulary	Repeat the same word	Only have limited knowledge of the necessary vocabulary	Uses a variety of the necessary vocabulary	Have a wide knowledge of the necessary vocabulary	Understands all necessary vocabulary
Word Order	There is no particular correct order.	Have a poor word order	Fairly good word order	There are a few errors despite the good order.	Excellent word order
Grammar	There is no correct grammar	Produces many grammatical errors	Produce several mistakes in grammar	Produce a few mistakes in grammar	There is mistakes in grammar

4. Finding sand Discussion

4.1. Findings

The researchers had four months to conduct the research in one of the public high schools in Batam. Researchers observed students' skills to speak English. Firstly, the researchers observed the classroom situation for three weeks from January until February 2023. The results of the observation revealed that the 10th-grade senior high school students had the poor speaking ability. It became clear when the researcher conducted the pre-test to evaluate the level of the student's speaking abilities. The researcher continued the prior technique employed in the class by instructing students to utilize a textbook-based learning strategy before administering the pre-test. Similarly, another study by (Dewi et al., 2023) found that practicing speaking with the traditional instructional method was ineffective. This made it more likely that the instructional environment would dull the students.

It might be demonstrated by the pre-test results that student had before the MALL (mobile-assisted language learning) technique was introduced to the class. The speaking assignment was given to 50 students as the data of the pre-test. During the activity, discovered that students had difficulties pronouncing several words. There is a low category in the average pre-test score of 59.56 among 50 students. Table 2 below will display the students' average speaking scores from their pre-test.

Table 2. The Students' Average Pre-test Score

No	Aspects	Pre-Tests Scores	Category
1	Pronunciation	52.52	Poor
2	Fluency	57.52	Poor
3	Vocabulary	60.54	Quite Good
4	Word Order	63.28	Quite Good
5	Grammar	63.96	Quite Good
	Average	59.56	Poor

Table 2 presented that the pre-test gained an average score is 59.56. Based on Table 1 the researchers determined, suppose the students' average score falls into the poor category. The table also shows the average pronunciation was 52,52 and followed by fluency was 57,52. Those aspects include poor categories. On the other hand, vocabulary, word order, and grammar have been included in medium levels such as 60,54 for vocabulary, 63,28 for word order, and 63,96 for grammar. However, the average of those aspects still needs to be improved.

Furthermore, the implementation of the strategy was held on Thursday, February 16th, 2023. The researcher used MALL (mobile-assisted language learning) to help them present the lesson material in the speaking class. First, an introduction to the material was given to students using the link to the microsite. The link was easier to access by students in acquiring the material. The researcher designed a microsite with more practice in English pronunciation because students were challenged in pronouncing several words in English. The learning process occurred in three weeks including the practice activity. In the last meeting of the chapter, the students were given a project assignment by researchers. Students had to write the text before presenting it to the class. The researchers applied this method by holding four meetings. The atmosphere in the class was quite pleasant when the MALL (mobile-assisted language learning) method was applied by the students. They seemed enthusiastic and excited to practice speaking English through media designed by researchers with a Microsite.

Thereafter, the researchers would evaluate students taking into account the post-test results following the completion of the MALL (mobile-assisted language learning) strategy implementation for the learning process approach after four meetings. 50 students performed

their project and show the results of what they had obtained throughout the meetings. The speaking scores of the students were then compared between the pre-test and post-test by the researchers. The outcomes indicated that the MALL (mobile-assisted language learning) post-test value increased as opposed to the pre-test value before the MALL (mobile-assisted language learning) was performed. The post-test outcome presents in Table 3.

Table 3. Pre-test and post-test scores of the student's average performance

No	Aspects	Average Scores of Pre-Tests	Average Scores of Post-Tests	Improvement
1	Pronunciation	52.52	62.66	10,14
2	Fluency	57.52	63.82	6,3
3	Vocabulary	60.54	66.66	6,12
4	Word Order	63.28	66.1	2,82
5	Grammar	63.96	68.12	4,16
	Average	59.56	65.47 (Quite Good)	5,91

Table 3 above shows that the average score for pre-tests is 59.56 and the average score for the post-test is 65.47. The difference between the pre-test and post-test scores reached 5.91% and moved into an excellent which is a quite good category according to the table assessment rubric used for this study. It was an outstanding achievement, especially a great improvement in pronunciation aspect was 10.14% and followed by fluency obtain a 6,3% improvement. Moreover, vocabulary, word order, and grammar increase the scores. Vocabulary gained a 6,12% improvement and followed by grammar was 4,16%. Finally, the least improvement gained among the aspects was word order.

4.2. Discussion

Based on these observations, it could be seen that the situation in the speaking class was monotonous and uninteresting. Classes become ineffective because students had to share learning materials with their chair mate. Students were distracted by their friends and did not pay attention in class. Therefore, the learning process was dominated by the teacher and focused on the textbook. (Dewi et al., 2023) agreed that conventional teaching strategies and guidance books foster students to feel bored with the learning situation.

Hence, the researchers conducted the MALL (mobile-assisted language learning) strategy in the classroom. The MALL (mobile-assisted language learning) is a teaching method that

incorporates smartphones into classroom learning activities. It can assist teachers to provide learning material and improve students' motivation in learning the English Language. (Pebiana & Pratiwi, 2023) discovered that MALL (mobile-assisted language learning) assisted teachers transmit lesson information. The students' learning motivation may be raised by the visualization of the instructional materials they created utilizing the microsite. (Alamer et al., 2022) Added that MALL (mobile-assisted language learning) affected students' motivation, concern about speaking a foreign language, and actual achievement using the instant messaging program. However, a study by (Chaloob et al., 2019) investigated teachers' perspectives on the challenges that primary and intermediate students confront when adopting MALL (mobile-assisted language learning). The statistics revealed a number of difficulties students encountered when using MALL to study English. Most students highlighted the compatibility between the content in the textbook and the mobile application learning program as a barrier. Therefore, MALL (mobile-assisted language learning) was considered to examine whether the strategy was effective in enhancing students' speaking abilities.

The average pre-test score obtained by students was 59.56 that as presented in Table 2 above. following the rubric of speaking, the value was categorized as Poor. It has appeared in the table that aspects of pronunciation and fluency need to be improved. According to (Marjona, 2023), the pronunciation of English was among the most challenging concepts to acquire. The challenge was the different mother tongue sounds cause difficulty pronouncing words correctly. The study also explains that good pronunciation is crucial to ensure that the person listening to the speaker will easily understand the words and convey the meaning behind them. (Al Halim & Arifin, 2023; Yin, 2019) have conducted a study to evaluate how effective YouTube content is through MALL (mobile-assisted language learning) to EFL students and discovered the integration of YouTube media in learning English has a significant impact on the development of students' English-speaking abilities. The media could improve students' speaking skills including pronunciation and other aspects. It encouraged researchers to include YouTube in the design of the Microsite.

The findings exposed the improvement of post-test into the pre-test was 5,91%. The table presents the average post-test score was 65.47% which means the speaking skills in the class improve into a quite good category. (Miqawati, 2020; Yin, 2019) discovered that MALL (mobile-assisted language learning) assisted students in enhancing their pronunciation skills. Based on the results, it was concluded that students achieved the target score using an application designed with pronunciation learning materials. Moreover, (Yin, 2019) showed significantly outperformed in speaking skills, especially pronunciation, and fluency after implementing MALL (mobile-assisted language learning). Previous studies will be associated with findings that reveal that the pronunciation aspect has a great increase of 10.14%, followed by fluency with an increase of 6.3% and both turn into a quite good

category. Previously, the researchers designed the Microsite that focuses on students' pronunciation and indicated that students' speaking skills improved especially in that aspect. It means that the success of the strategy to achieve the goals depends on the design of the material provided in the Microsite. Additionally, the previous study gained positive student responses to enhance motivation through the implementation of MALL (mobile-assisted language learning) and would be used to support this finding.

Lastly, the researchers investigated students' attitudes in the class during the implementation of MALL (mobile-assisted language learning) and discovered that students were active and involved in all of the activities given by the researchers. They were more excited and enjoyed the learning instead of the Pre-test section. Students were interested to learn and increase their speaking scores. Through MALL, learners could express their ideas via speaking activities without fear of judgment and stress (Abugohar et al., 2019; Shamsi et al., 2019). The application of mobile features made it possible for learning to occur in a fun and stress-free environment. Furthermore, the implementation of MALL promotes learning possible anytime and anywhere. (Wan, 2019; Yin, 2019) demonstrated that students could participate in speaking activities away from the classroom. In addition, active learning occurred outside of it as well. It supports the findings that discovered students could learn and gain access to material in outside learning activities in the classroom.

5. Conclusion

The research results indicate that mobile-assisted language learning positively affects students' abilities in speaking English. The strategy is suitable and effective in solving the problems of students who have low motivation in learning because of the learning material provided. Students with low English-speaking skills can improve using this method and effectively increase motivation at one of the public schools in Batam. The results of both the pre-test and post-test scores demonstrated that using this strategy increased students' English-speaking abilities. Pre-test scores show the average score obtained was 59.56. Following the value criteria table that has been determined by the researchers, it is included in the poor category. Then, the researchers implemented the mobile-assisted language learning method for 4 meetings. Throughout the post-test given to students, the researchers discovered an improvement in students' speaking skills after using the mobile-assisted language learning method. The average score of post-tests was 65.47 and improved 5,91% of speaking abilities from the average scores of pre-tests. The average post-tests turned into a quite good category following the rubric scoring table designed by the researchers. Moreover, the researchers focused to design learning material in pronunciation aspects and achieved a great improvement in pronunciation aspect was 10.14% and followed by fluency obtaining a 6,3% improvement. In this regard, the method can adjust to the target aspects' achievement. In addition to increasing the value of speaking, students' motivation in learning also can be noticed through the involvement of students in the class. Students were interested to learn

and being active during English class because the interesting material had been designed by researchers.

The improvement in students' speaking skills with the mobile-assisted language learning strategy recommends English teachers to teach using this strategy. In this regard, the teacher can take several steps: first, the teacher determines interesting media and designs learning material into Microsite well. Second, the teacher must not forget to plan activities and prepare assessment procedures. The teacher must also manage time effectively when using the Mobile-Assisted Language Learning method so that activities can be carried out properly. Lastly, the teacher explains the method properly so that students understand what they have to do. As for students, researchers expected the strategy could enhance students' motivation to learn English and changed their perspective on difficult and boring English. Researchers wished students speaking abilities improved through activities in the class. Additionally, it is recommended that other researchers conduct further research using various topics and interesting activities to discover another advantage of this strategy.

References

- Abugohar, M. A., Yunus, K., & Rashid, R. A. (2019). Smartphone applications as a teaching technique for enhancing tertiary learners' speaking skills: Perceptions and practices. *International Journal of Emerging Technologies in Learning*, 14(9), 74–92. <https://doi.org/10.3991/ijet.v14i09.10375>
- Ahmed, A. A. A., Hassan, I., Pallathadka, H., Keezhatta, M. S., Haryadi, R. N., Al Mashhadani, Z. I., Attwan, L. Y., & Rohi, A. (2022). MALL and EFL Learners' Speaking: Impacts of Duolingo and WhatsApp Applications on Speaking Accuracy and Fluency. *Education Research International*, 2022. <https://doi.org/10.1155/2022/6716474>
- Al Halim, M. L., & Arifin, M. (2023). The Use of Youtube as a Supporting Media for Learning English Through MALL (Mobile-Assisted Language Learning) Approach during Limited Face-to-Face Learning. *JALIE; Journal of Applied Linguistics and Islamic Education*, 7(1), 63–80.
- Alamer, A., Al Khateeb, A., & Jenou, L. M. (2022). Using WhatsApp increases language students' self-motivation and achievement, and decreases learning anxiety: A self-determination theory approach. *Journal of Computer Assisted Learning*. <https://doi.org/10.1111/jcal.12753>
- Ali, M. K., & Maksum, H. (2020). Utilization of E-Learning-Based ICT Learning Using the Google Classroom Application During the COVID-19 Pandemic. *Journal of Educational Research and Evaluation*.

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- Arifiyanto, A., Utari, P., Andre Noevi Rahmanto, dan, & Sebelas Maret, U. (2019). Platform Microsite : Konvergensi Media Publikasi Kementrian Keuangan RI di Era Literasi Digital. *Jurnal Ilmu Komunikasi*, 8(2), 46–56.
- Budiawan, W., Harunasari, S. Y., & Kusumajati, W. K. (2019). Meningkatkan Keterampilan Berbicara Siswamelalui Mobile-Assisted Language Learning menggunakan Aplikasi Cleverbot. *Prosiding Seminar Nasional Pendidikan STKIP Kusuma Negara*.
- Chaloob, A., Al-Khayyat, A., & Sulaiman, W. (2019). Investigating The Obstacles That Face Primary and Intermediate Students in Using Mobile Assisted Language Learning (MALL) from Teachers' Perspectives. *IASJ Journal of Applied Jazz Research*.
- Dewi, N. S., Hartiwi, J., Yani, N. A., & Sutiwi, S. (2023). The Implementation of Linguistic Intelligence In Teaching Speaking Through Audio-Visual. *Journal on Education*, 05(04).
- Elvyra, & Zaki, L. B. (2023). Designing Project-Based Narrative Text Using Wattpad. *Journal UIB-Conference on Community Engagement Project*, 3(1). <https://journal.uib.ac.id/index.php/concept>
- Eryansyah, Erlina, Nurwani, A., & Nurweni, A. (2019). EFL Students' Needs of Digital Literacy to Meet the Demands of 21st Century Skills. *Indonesian Research Journal in Education [IRJE]*.
- Garpersz, S., & Uktolseja, L. J. (2020). The use of serial picture media to improve english speaking ability at SMP YPK Syaloom Klademak Sorong City. *Jurnal Pendidikan Bahasa*, 7(2), 36–45.
- Gultom, E., Pudjiati, D., & Martisa, E. (2022). EFL Digital Literacy of Promoting Speaking Skill through MALL: A Confirmation of Indonesian EFL. *The 9th ELITE International Conference 2021*, 1–8.
- Jaelani, A., & Adung, N. (2022). THE USE OF MOBILE-ASSISTED LANGUAGE LEARNING TO PROMOTE LEARNER AUTONOMY IN THE EFL SPEAKING CONTEXT. *Journal of English Education*, 8(1). <https://doi.org/10.30606/jee>
- Karunasri, A., Damodar, G., & Ravikumar, P. (2022). Conveniences and Complexities in the Domain of Mobile Assisted Language Learning at the Backdrop of Pandemic Situation. *International Journal of English and Education*, 11(1). www.ijee.org
- Li, X. (2022). The Effectiveness of Mobile-assisted Language Learning (MALL) Applications on the Spoken English Assessments in China's Universities. *Atlantis Press: Advances in Social Science, Education and Humanities Research*, 631.
- Lu, X. (2022). The Application of Mobile-Assisted Language Learning (MALL) in Developing Early English Acquisition. *Advances in Social Science, Education and Humanities Research*.
- Marjona, Q. (2023). How to Greatly Improve The Pronunciation in English. *Proceedings of International Conference on Scientific Research in Natural and Social Sciences*. <https://www.fluentu.com/blog/english/how-to-improve-english-pronunciation/>

- Marsevani, M., & Habeebanisya. (2022). A Classroom Action Research: Improving Speaking Skills through work in pairs technique. *TLEMC :Teaching and Learning English in Multicultural Context*, 6.
- Miqawati, A. H. (2020). Pronunciation Learning, Participation, and Attitude Enhancement through Mobile Assisted Language Learning (MALL). *English Review: Journal of English Education*, 8(2), 47. <https://doi.org/10.25134/erjee.v8i2.2118>
- Murugan, A., & Teoh, G. B. S. (2022). The Effectiveness of Mobile-Assisted Language Learning (MALL) via smartphone applications for tertiary ESL learners. *Journal of Contemporary Social Science and Education Studies*, 2(2). www.jocss.com
- Mustaqimah, N., Dama, L., Fajryani Usman, N., & Nur Akbar, M. (2023). Pengembangan Media Flashcard dengan Panduan Belajar Sambil Bermain Menggunakan Microsite untuk Pembelajaran Biologi Materi Klasifikasi Makhluk Hidup. *Khazanah Pendidikan- Journal Ilmiah Pendidikan*, 17(1). <https://doi.org/10.30595/jkp.v17i1.17159>
- Pebiana, & Pratiwi, T. L. (2023). The implementation of ICT in English subjects to increase student's motivation in learning at SMAN Negeri 16 Batam. *Journal UIB - Conference on Community Engagement Project*, 3(1). <https://journal.uib.ac.id/index.php/concept>
- Pranawengtiyas, W. (2022). Undergraduate Students' motivation on English Language Learning at Universitas Teknokrat Indonesia. In *Journal of English Language Teaching and Learning (JELTL)* (Vol. 3, Issue 2). <http://jim.teknokrat.ac.id/index.php/english-language-teaching/index>
- Ramadan, M., Laoli, D., Dwi P, A., Sutrisna, Ilham, A., Maidyangsa, A., & Afrianto, I. (2023). Rancang Bangun Aplikasi Media Pembelajaran Pengenalan Angka dan Huruf dalam Bahasa Inggris untuk Anak Usia Dini Berbasis Android. *Jurnal Ilmiah Komputer Dan Informatika (KOMPUTA)*.
- Septian, A. O., & Simaibang, B. (2023). Improving Students' Motivation and Speaking Ability Using Online Media Learning. *ESTEEM: Journal of English Study Programme*.
- Setiyanti, A., Sumantri, M. S., Dewanti, R., & Lustyantie, N. (2022). Enhancing Undergraduate Students' Speaking Performance through Mobile-Assisted Learning Language. *Journal of Positive School Psychology*, 2, 3815–3822. <http://journalppw.com>
- Shamsi, Ahmad. F., Altaha, S., & Gilanlioglu, I. (2019). The Role of M-Learning in Decreasing Speaking Anxiety for EFL Learners. *International Journal of Linguistics, Literature and Translation (IJLLT)*. <https://doi.org/10.32996/ijllt.2019.2.1.34>
- Sherine, A., Seshagiri, A. V, & Sastry, M. M. (2020). Impact of WhatsApp Interaction on Improving L2 Speaking Skills. *International Journal of Emerging Technologies in Learning (IJET)*, 15(3), 250–259.

-
- Situjuh, N. (2019). ICT Use in EFL Classroom. *ROCEEDING English Education Department Collegiate Forum (EED CF) 2015-2018*, 126–135.
- Suvarnaphaet, K. M., & Suvarnaphaet, P. (2023). Use of Podcasts to Develop Students' Speaking Skills. *HASS: Humanities, Arts and Social Sciences Studies* , 23(1), 1–8. <https://so02.tci-thaijo.org/index.php/hasss>
- Wan, L. (2019). The Application Research of Mobile Learning App “English Fluency” in College English Oral Teaching. *International Conference on Education Technology, Management and Humanities Science*. <https://doi.org/10.25236/etmhs.2019.008>
- Wibowo, A. (2023). Ict-Based Instructional: Microsite-Based Learning For Accounting Students In Sekolah Harapan Utama. *ConCEPt - Conference on Community Engagement Project*, 3(1). <https://journal.uib.ac.id/index.php/concept>
- Xu, Q. (2020). Applying MALL to an EFL Listening and Speaking Course: An Action Research Approach. In *TOJET: The Turkish Online Journal of Educational Technology* (Vol. 19, Issue 4).
- Yin, S. (2019). An Empirical Study on Improving Speaking Skills of Students in Vocational Colleges Under MALL Environments. *ICCIS: International Conference on Computation and Information Sciences*.