

Implementation of the Speakia Application for Junior high school: Student' Point of View

Nabila Irsani¹, Benni Ichsanda Rahman Hz²

nabilairsani0304201094@uinsu.ac.id, benni.ichsanda@uinsu.ac.id

Universitas Islam Negeri Sumatera Utara Medan

Received:2024-06-23 Accepted:2024-07-15

DOI:10.2456/Ideas.V12i2.5343

Abstract

This study explores the implementation of the Speakia application in enhancing English vocabulary among junior high school students from their perspective. Technological advancements have significantly influenced language learning, making it more interactive and accessible. The Speakia app, used by over fifty million users since 2021, offers a virtual environment for practicing English through immersive daily activities. This research aims to evaluate the effectiveness of Speakia in improving vocabulary, its advantages, disadvantages, and the motivational impact on students. A qualitative case study methodology was employed, involving 25 purposively selected junior high school students. Data was collected through adapted questionnaires and semi-structured interviews. Quantitative analysis of the questionnaires provided insights into students' perceptions, while qualitative analysis of interviews offered an in-depth understanding of their experiences. Results indicate that students generally find Speakia easy to use and effective in enhancing vocabulary. The app's interactive features, quizzes, and real-time pronunciation feedback are highly appreciated. However, challenges such as the need for premium accounts for advanced levels and reliable internet access were noted as significant barriers. Despite these drawbacks, students reported increased motivation and active engagement in learning English through the app.

Keywords: Speakia application, Perspective, Educational Technology.

Introduction

Technology for learning English has been essential in enhancing the language

learning process (Ahmad Kashmiri, 2020; BAŞAR & ŞAHİN, 2022; Basheer Nomass, 2013). The use of technology in the teaching of English has proved critical in modifying traditional teaching methods. Technological advances have ushered in a new era of dynamic and interactive learning experiences for teachers and student (BAŞAR & ŞAHİN, 2022). Access to a huge number of online resources, including interactive website's, e-books and multimedia content, has revolutionized the way English is taught and learned. Language learning apps and platforms offer personalized lessons, allowing students to practice at their own pace and schedule. In addition, online language exchanges connect students with English speakers around the world, providing authentic language practice and cultural exposure. In the learning environment, interactive technology has resulted in active learning, in which students participate in the learning process and develop their language skills. This technology assists students in developing their creativity, inventiveness, and cognitive to study foreign languages (Azlina A.Rahman et al., 2014; Khan et al., 2017)

Including in teaching vocabulary skills, technology can be integrated to improve students' vocabulary mastery. Including in teaching vocabulary skills, technology can be integrated to improve students' vocabulary mastery. In English language learning, several technologies are provided that can be used to improve vocabulary mastery; Duolingo, Speakia, ELSA, EWA, Cake, and Beelinguapp. One of the applications in Speakia. This application has been used since 2021 and has been used by more than fifty million users. According to this downloading number, this app was developed by Edu Maxi Ltd and is used to stimulate speaking and increase students' vocabulary. The Speakia application provides a virtual world where children and students can listen, practice, collect vocabulary and speak English to increase their confidence in using the language. provides chat images, cartoons and real-life scenarios to create interactive and fun learning. The app uses advanced audio technology to provide real-time pronunciation feedback, allowing users to practice speaking English and expand their vocabulary through immersive daily activities. with matters closely related to daily life, the program offers customized reports and analysis to track user progress. This program has been recommended by parents, children and teachers because of its effectiveness in improving children's English skills. With a clear and beautiful design, Speakia aims to make learning

English easy and fun for children, providing a valuable tool for regular speaking between English lessons.

One of the most crucial aspects of learning a foreign language for students is expanding their vocabulary; having too little vocabulary in the second language will eventually make communication more difficult (Ahmadi, 2018). Moreover, according to (ALQAHTANI, 2015), getting a sufficient vocabulary is crucial for successfully using a foreign language because a language learner lacking a large vocabulary will not be able to apply the structures and functions they have learned for understandable communication. Further, since language is made up of words, teaching vocabulary is a crucial component of learning a language (theory). Teaching vocabulary is a crucial part of learning a language because it enables students to develop all language skills, including speaking, writing, listening, and reading. Students who have a large vocabulary can strengthen it through practice in real life (Finochiaro, 2011). As is the case with vocabulary acquisition, students will inevitably face a variety of obstacles or hurdles when trying to expand their vocabulary. Because spoken and written English sound different, pronunciation can be a challenge for students learning new vocabulary. There are few resources for word knowledge, students learn a vast number of words, and there is also a deficiency in word grammar knowledge. These are a few of the challenges students have when picking up new words.

This application can be used where the researcher teaches because, based on the researcher's observations, certain students have few vocabularies or have little accurate language. Based on the observations, students have less interest in English outside of the classroom. Students also have trouble in comprehending how to use language in real-world circumstances, making it hard to remember. Another barrier is that pupils lack and have trouble practicing consistently in daily conversation or writing. Simultaneously, when introducing vocabulary, kids struggle to pronounce it correctly. A scarcity of guidance is probably one of the contributing factors to various problems among student's when it comes to expanding vocabulary.

The integration of Mobile Assisted Language Learning (MALL) tools into English as a Foreign Language (EFL) education has garnered considerable attention in educational research. Over the past decade, studies have consistently demonstrated the efficacy of MALL in improving various aspects of language learning, such as speaking, listening, reading, and writing skills. Researchers like M. Liu, (2014); Shang, (2022); K. Sun, (2023) have established that MALL tools can significantly enhance learner engagement and provide flexible learning opportunities that are not bounded by geographical or temporal constraints. Furthermore, gamification features commonly used in these applications were found to boost motivation and enhance the learning experience. There are several studies that have investigated the use of mobile apps in teaching vocabulary (Aisyah & Hidayatullah, 2023; Anton Adi Purwanto & Syafryadin, 2023; Basal et al., 2020; Klimova, 2021). (Aisyah & Hidayatullah, 2023) demonstrates how using the Duolingo app can help MI Class 3 A students Tarbiyatul Islam's English vocabulary. This is evident from a number of the application's factors, such as the fact that an analysis of the students' starting abilities is present. This has a significant impact on the passing level. After that, some features can pique students' interest and features for repetition and practice. (Basal et al., 2020) proved that implementing mobile phone applications improves vocabulary teaching and acquisition. (Klimova, 2021) found that mobile applications are effective, efficient, and useful tools for learning to keep and process new vocabulary among EFL university learners. (Anton Adi Purwanto & Syafryadin, 2023) According to the findings of the study, students can utilize the Duolingo app to study English vocabulary that is simple to acquire, and students are more enthusiastic and enthused in the learning process. These studies explore multiple perspectives on previous application-based technologies that reach varied conclusions. However, there has been little inquiry into how to use the Speakia apps for vocabulary development. Learning vocabulary with the Speakia application can increase students' speaking, hearing, and vocabulary, and the Speakia application unlearning's also very significant since it is to discover new insights or ideas on how specific. apps are effectively utilized in learning.

To that extent, speaking vocabulary with applications is hypothesized can increase the students' vocabulary mastery. Applications like Edu candy, Duolingo,

EWA, and Cake that are meant to aid in vocabulary mastery have been referred to as tools that can advance students' vocabulary mastery. Studies utilizing the Speakia app have revealed that students' vocabulary comprehension has increased. This application's engaging games and interactions can aid students in becoming more proficient in vocabulary. One tech-based strategy to assist students in comprehending and identifying the vocabulary they are learning is the Speakia application. With the aid of web, mobile, or tablet technology, this application assists students in learning and mastering vocabulary. The Speakia app has several benefits that make it useful for enhancing students' vocabulary acquisition. Additionally, it makes use of algorithms that can identify mistakes and ask students to repeat words they don't understand. Researchers must also consider the difficulties students face in understanding instructions from the Speakia application. Research using the Speakia app shows that students can use the app to improve their vocabulary. Thus, this research aims to see and assess the utilization of Speakia apps in the teaching-learning process, from the perspective of students.

Method

In this study, the researcher decided that a qualitative case study would be the most appropriate research methodology to examine students' perspectives in using the Speakia application to expand their vocabulary. Case studies, according to (Baxter & Jack, 2015), are a type of research that facilitates the investigation of a phenomenon in its context by describing and understanding different facets of the phenomenon through the utilization of diverse information sources. By employing this technique, researchers will gain a thorough grasp of how students view the Speakia Application and how it effectively affects their vocabulary growth. As a result of the information sources in the case study, multiple sources of information will help explain this phenomenon and enable in-depth research on contextual factors that will affect perceptions.

This research used purposive sampling to select a sample of 25 middle school students. Because all participants were also junior high school students, the selection of participants was based on proficiency and experience in improving

students' English vocabulary. Students are allowed to use cell phones in class, and their teachers allow them to use the app. This research was conducted in a city with extensive internet access. This qualitative research uses two primary data collection methods: a modified questionnaire that incorporates elements of a particular teaching method or learning approach and semi-structured interviews. This approach was used to thoroughly investigate and understand the effect of implementing the Speakia Application on improving the vocabulary of junior high school students in, as revealed through the students' perspectives. The adapted questionnaire, inspired by (Jurgelaitis et al., 2019) concentrates on qualitative aspects related to incorporating the Speakia App into vocabulary instruction, aiming to capture the full range of experiences and perceptions of students engaging with this technology. At the same time, semi-structured interviews facilitated deeper qualitative exploration, allowing students to express their different points of view and explain the complexity of their interactions with the Speakia App. By using this qualitative methodology, this research seeks to reveal detailed and context-specific insights into how junior secondary students perceive and use the Speakia Application in improving their vocabulary in learning.

There are two methods used to analyze data, namely quantitative and qualitative. Quantitatively, the results of student questionnaires will be analyzed to produce various assessments regarding how this application is perceived by students. This involves using statistical techniques to collect various assessments of how students perceive the application. Qualitatively, the results of the interviews will be developed and given a more in-depth analysis. The goal of qualitative analysis is to provide a comprehensive and in-depth analysis of the information gathered from interviews. To gain a deeper understanding of the subjective experiences and perspectives related to app use, a deeper interpretation of participants' responses is needed.

Result and Discussion

Result

In this section will be explained about the research information collected by giving a survey to seventhgrade junior high school (SMP) students at Daarul Istiqlal

Marindal school. The results obtained will include data on how students view the implementation of the Speakia app in improving their vocabulary. By dividing parts of several indicators according to research variables including, effectiveness, advantages, disadvantages, motivation. The following is a graph of the overall percentage of respondents for each indicator.

Table 1. The effectiveness of Speakia App

STATEMENTS	RESPONDEN			
	Strongly Aggre %	Agree %	Disagree %	Strongly Disagree %
1. Speakia is easily accessible anywhere to learn English	28%	72%	0	0
2. I find it easier to learn English with Speakia	42%	48%	10%	0

This table shows the effectiveness of Speakia and the data obtained in the first question is that the Speakia application is easily accessible anywhere to learn English. The results show that 28% of students strongly agree and only 72% agree, and there is no indication of strongly disagree or disagree. The second statement is about students easily learning English with Speakia. 48% of students agree and 42% strongly agree with this statement. Meanwhile, 10% of students disagree with the statement and there is no indication of strongly disagreeing with the statement. It can be concluded from both statements that the majority of students tend to agree or strongly agree that the Speakia application is very easy to use and understand. These results also show that in general, they have a positive perception of the ease

of using the Speakia application.

The application is very easy to use, just by opening the application feature to study the material (respondent 1), "In my opinion, it is easier to increase vocabulary with this application because the vocabulary provided can be used in learning (respondent 2)".

The interviewees' responses provide credence to these conclusions. The majority who gave Speakia the highest score (72%) said it works. No matter where they are or when they practice, it can help them expand their vocabulary in English.

Table 2. The advantages of using Speakia App

STATEMENTS	RESPONDENTS			
	Strongly Agree %	Agree %	Disagree %	Strongly Disagree %
3. Speakia can help me improve my vocabulary	44%	56%	0	0
4. the quizzes and questions provide by Speakia are not boring and easy to understand	60%	40%	0	0
5. Speakia assist me learn English vocabulary at home easily	57%	43%	0	0

This table shows the advantages of Speakia and the data obtained in the third statement is about the Speakia application which can help improve vocabulary showing that 57% of students strongly agree, while the majority of students around 43% agree. And no indication shows disagreement or strong disagreement. The conclusion is that Speakia can improve students' vocabulary with the Speakia application. The fourth statement about the quizzes and questions given by Speakia is not boring and easy to understand, showing that 69% of students strongly agree

and 40% agree. While there is no other indication that shows statements of disagreement and strongly disagree. The conclusion obtained is that this statement is widely agreed that the quizzes and questions of Speakia are not boring and easy to understand.

For the fourth statement about Speakia helps to increase English vocabulary at home easily. The results show that as many as 56% agree and 32% of students agree with the statement. Meanwhile, there is no indication that states disagree or strongly disagree with the statement. From the statements above, it can be concluded that the majority of respondents support the statement, by showing a positive perception of the role of Speakia in helping students learn and increase English vocabulary.

"Yes, Speakia helps me to add new vocabulary in learning English (respondent 1), "the quizzes given by Speakia are easy to understand, although some of them are a bit difficult, Speakia uses quite simple vocabulary so it will be easy (Respondent 2), "yes, because Speakia is downloaded on a cellphone so we can use it anytime at home (respondent 3)".

The statement with the highest value demonstrates how simple it is for students to use Speakia at home to increase their vocabulary. Additionally, the interviewees' responses support this conclusion, indicating that Speakia can benefit students' vocabulary development.

Table 3. The disadvantages of using Speakia App

STATEMENTS	RESPONDENTS			
	Strongly Agree %	Agree %	Disagree %	Strongly Disagree %

6. Speakia is not suitable for use because there is a payment system for more advanced levels	60%	40%	0	0
7. As a student the Speakia application is difficult to access because it requires a premium account to open new material	76%	24%	0	0
8. Speakia application is less effective because it requires a wide internet network	8%	56%	36%	0

The information gathered regarding Speakia's drawbacks is displayed in this table. It is evident from the sixth statement that Speakia's payment system for the new level renders it unfit for use. Forty percent of students agreed with the statement that Speakia is not appropriate for use, and up to 60% of students said they strongly agreed. None of the students expressed strong disagreement with this statement. Most respondents agreed or strongly agreed that the payment system for higher levels makes Speakia not suitable for use. This shows a strong negative perception of the cost barriers caused by the payment system.

The seventh statement is about students finding it difficult to use because it requires a premium account to open advanced materials. There are 76% of students strongly agree with the statement and 24% of other students also agree. While there are no results from disagreeing or strongly disagreeing. Most respondents agree that the need for a premium account to access new materials makes the application difficult to use. This shows that the cost of accessing premium features is a significant obstacle for student users.

The eighth statement is that the Speakia application is less effective because it must use an internet network. As many as 56% of students agree, and 8% of students strongly agree, while the majority of students around 36% disagree with the statement. There is no indication of disagreeing or strongly disagreeing. Although the

Nabila Irsani, Benni Ichsanda Rahman Hz
Implementation of the Speakia Application for Junior high school: Student' Point of View

majority of respondents (64%) agree that the need for a wide internet network reduces the effectiveness of the application, 36% disagree with this statement. These diverse responses indicate that although internet connectivity is a problem for many users, it is not a universal problem.

According to the three respondents' statements, the majority of students concur that eighth-grade junior high school students should not use the Speakia application. The findings show that money is needed for the Speakia application in order to provide access to more advanced materials or levels.

The results of the data obtained can be strengthened by the opinions of respondents in the interview. Their opinions show that Speakia is difficult to access because of internet usage and the existence of a payment system and must have a premium account to open high levels.

"Yes, it's not very suitable, because this application has to be paid to open a high level (respondent 1), "this application is difficult to access to open advanced materials because it requires a premium account (respondent 2), "it might not be effective, because there won't always be an internet connection so the application can't be used when there is no internet (respondent 3)".

Conclusion The survey results highlight two major issues with the Speakia application: the cost of accessing advanced features and the requirement for a premium account to access new material. Both of these aspects are seen as significant barriers to effective use, particularly for students. Additionally, while internet connectivity requirements are a concern for a majority of users, they are not as universally problematic as the cost-related issues. This feedback can guide future improvements to the application, focusing on making advanced features and new materials more accessible and affordable.

Table 4. Students' motivation in using Speakia App

STATEMENTS	RESPONDENTS			
	Strongly Aggre %	Agree %	Disagree %	Strongly Disagree %
9. The Speakia application is very interesting and adds to my motivation in learning English	59%	33%	8%	0
10. Speakia makes me more active to increase my vocabulary	52%	48%	0	0
11. I immediately practiced the new vocabulary provide by Speakia	23%	59%	18%	0

This data shows students' motivational statements on Speakia. It can be seen from the responses given by respondents to the ninth statement regarding the interesting and motivating Speakia application in learning English. As many as 59% stated that they strongly agree, while 33% of students stated that they agree with the statement. On the other hand, the majority of students around 8% stated that they disagreed, and there was no indication that they strongly disagreed. The results obtained were as many as (92%) received a positive view of the Speakia application which can increase motivation in learning English.

The tenth statement about Speakia makes students active in improving their vocabulary. As many as 52% of students stated that they strongly agree with the statement. On the other hand, the majority of students 48% stated that they agree and there were no results from the statements disagree and strongly disagree. The majority of students (100%) agreed that Speakia can make students more active in improving their vocabulary.

In the eleventh statement regarding the use or direct practice of vocabulary provided by Speakia. The results obtained, 59% of students stated that they agree and 23% of students stated that they strongly agree with the statement. While 18%

of students stated that they disagree and there was no indication of strongly disagree results. The results showed that most students directly use the vocabulary provided by Speakia in learning English.

The perspectives provided by interviewees can support the analytical findings. According to the respondents, Speakia is highly engaging and can boost enthusiasm for studying English.

"Yes, Speakia is interesting and makes me motivated to use it in learning English (respondent 1), Speakia uses interesting animations and images that make me actively use it to increase my vocabulary (respondent 2), "Yes, Speakia provides simple vocabulary in conversation that makes me use it directly in learning English (respondent 3)".

The conclusion of the results obtained shows that Speakia can increase students' motivation in learning English and they also directly use vocabulary in learning English. This also provides positive stimulation in learning, especially vocabulary mastery.

DISCUSSION

The researcher analyzed the data in the results section to identify several different perspectives on the implementation of students' vocabulary enhancement in using the Speakia App in English language teaching. The general view among the participants was that the Speakia App was easy to use and accessible to acquire English vocabulary and language. This outcome is consistent with the positive outcomes from the initial and subsequent Google Form statements. This learning tool is excellent for those who want to learn English. Teachers and other language learners will find this application useful in addition to pupils. While some participants thought the Speakia App was helpful, the majority saw it as a teaching tool (Jin & Zhirui, 2017; Orhan, 2023).

Overall, Speakia received positive responses from students in this study. With the development of the questionnaire, students consistently stated that Speakia was very easy to use in increasing vocabulary. As evidenced by the data collected,

students do not see Speakia as a useful tool but students also see it as a motivator that encourages them to be more active in improving their English vocabulary. In addition, the use of Speakia as a whole increases students' activeness in improving their vocabulary. These results provide a deeper understanding of the contribution of the Speakia application to the efficiency and improvement of students' English vocabulary in junior high schools. Therefore, the role of the Speakia application in improving students' vocabulary in schools is supported by a strong foundation with the results of the research that has been obtained. The majority of students provided favorable feedback rather than unfavourable remarks on the Speakia application. They unanimously acknowledged that the software serves as a means to motivate students in acquiring English language proficiency. It is deemed suitable for acquiring new information in unfamiliar contexts, and the characteristics of the Speakia application are very impressive and captivating. Students universally agree that the Speakia application greatly aids in the practice and real-world application of English in everyday situations. The Speakia program functions as a reservoir of inspiration and encouragement for users throughout their learning journey. As a result, their excitement to learn new words increases. Competence which is an important component of language proficiency with a strong foundation for students' listening, speaking, reading, and writing skills. The ability of students to formulate their expressions that are applied to the knowledge they have acquired (Luo, 2022; Zhang et al., 2023). The Speakia application is perfect for the English as a Foreign Language (EFL) learning platform, this gets various good things stated by its users. Because there is vocabulary learning and provides presentations that are easy to use and understand. It can be seen from the interesting Speakia application using AI technology and the use of flashcards to strengthen memory and stimulate their memory in remembering something presented in a picture and its words. This is in line with statements from previous studies such as (Mindog, 2016; Niño, 2015; Steel, 2012) , confirming that the use of flashcard media helps to improve students' memory of the words presented in the picture.

The findings of our research presented in Table 2 are about the use of Speakia which can help improve students' vocabulary by providing explanations of questions or quizzes that are easy to understand and use at home according to the results

received. These results are in line with previous research findings which state that technology should be used to help people learn English (Chen Hsieh et al., 2017; Kaur, 2019). The essence of this is that Speakia makes it very easy for students in the learning process, especially improving their vocabulary. This finding provides a positive contribution and has an effective function in increasing vocabulary addition and student performance in the context of English learning.

Other results of our study also show that the obstacles to using the Speakia application can be seen in Table 3 in the sixth statement which states that Speakia is not suitable for use because there is a payment system for higher levels. The majority of respondents (total 100%) agree or strongly agree that the payment system for higher levels makes Speakia not suitable for use. This shows a strong negative perception of cost barriers caused by the payment system. The seventh statement also shows that the majority of respondents (100%) agree that the need for a premium account to access new materials makes the application difficult to use. This shows that the cost of accessing premium features is a significant barrier for student users. While most respondents (64%) agreed that the need for a wide internet network reduces the effectiveness of the application, 36% disagreed with this statement. These diverse responses indicate that although internet connection is a problem for many users, it is not a universal problem. The results of the study were obtained and presented in Table 4 on how Speakia provides motivation and stimulation for students to use the application actively in learning. seen from the results obtained in the ninth statement as many as (92%) of students agreed that Speakia makes students motivated to improve their vocabulary because the very interesting application is presented with various animated images. In the tenth statement, it is also seen that most students as many as (100%) of students agree that they feel active in improving vocabulary by using Speakia. And for the eleventh statement, most students as many as (82%) agree that they immediately practice vocabulary in learning English after they use the application.

The majority of students agree with the statement given to get a positive view to improve English vocabulary mastery. So, it can be concluded that Speakia plays a

very important role in increasing student motivation in increasing their vocabulary, this application also plays an important role in encouraging student activeness in learning English. The efficacy of using games as a learning tool may be compromised by students' preference for this approach. A fundamental constraint of this application is a defect in the speaking test, whereby the participant's voice is sometimes misidentified, despite the participant's precise pronunciation. The only problem that participants have while using this program is of little importance to their score. This is because the incidence happens seldom, and it is not a serious problem that would cause a loss in score or negatively impact participants' pronunciation.

Conclusion

The study revealed several perspectives on the use of the Speakia App for enhancing students' vocabulary in English language teaching. Participants generally found the Speakia App to be easy to use and accessible for acquiring English vocabulary. This aligns with the positive feedback collected through Google Forms. Teachers and language learners also recognized its value, though some participants primarily viewed it as a teaching tool. Students consistently reported that the Speakia App was effective in increasing their vocabulary. They viewed the app as both a useful tool and a motivator that encouraged active engagement in learning English. The app's use significantly increased students' activeness in improving their vocabulary, providing a deeper understanding of its contribution to vocabulary enhancement in junior high schools. The majority of students provided favourable feedback, acknowledging the app's motivational role in acquiring English language proficiency.

The Speakia App was praised for its impressive and captivating features, which aid in the practice and real-world application of English. It serves as a source of inspiration and encouragement, increasing students' enthusiasm for learning new words. The app supports the development of listening, speaking, reading, and writing skills, allowing students to apply their knowledge effectively. However, the study also identified some obstacles to using the Speakia App. The payment system

for higher levels and the need for a premium account to access new materials were significant barriers for students. Additionally, the requirement for a stable internet connection was seen as a challenge by some users. Despite these issues, the app was found to provide motivation and stimulation for active learning, with a majority of students agreeing that it made them more active in improving their vocabulary. In conclusion, the Speakia App plays a crucial role in increasing student motivation and activeness in vocabulary learning. While there are some constraints, such as the payment system and internet requirements, the app's overall efficacy in enhancing vocabulary and encouraging active learning is well-supported. The minor issue of misidentifying participants' voices in the speaking test does not significantly impact its effectiveness. Overall, Speakia is a valuable tool for English language learners, fostering a strong foundation in vocabulary and language proficiency. Furthermore, further research is suggested to explore the application of Quizizz in developing additional skills.

References

- Ahmad Kashmiri, H. (2020). Communication challenges: Saudi EFL Speaking Skills and strategies to overcome speaking difficulties. *Arab World English Journal*, 267, 1–61. <https://doi.org/10.24093/awej/th.267>
- Alfatihah, A., Ismayanti, D., Syam, A. T., & Santaria, R. (2022). Teaching Speaking Skills through Project-Based Learning for the Eighth Graders of Junior High School. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 10(1), 152-165.
- Ahmadi, D. M. R. (2018). The Use of Technology in English Language Learning: A Literature Review. *International Journal of Research in English Education*, 3(2), 115–125. <https://doi.org/10.29252/ijree.3.2.115>
- Aisyah, N., & Hidayatullah, M. H. (2023). Implementasi Aplikasi Duolingo dalam Meningkatkan Kosakata Bahasa Inggris. *Bidayatuna Jurnal Pendidikan Guru Mandrasah Ibtidaiyah*, 6(1), 44–59. <https://doi.org/10.54471/bidayatuna.v6i1.2015>
- ALQAHTANI, M. (2015). The importance of vocabulary in language learning and how to be taught. *International Journal of Teaching and Education*, III(3), 21–34. <https://doi.org/10.20472/te.2015.3.3.002>
- Anton Adi Purwanto, & Syafryadin. (2023). Students' Perception on Using Duolingo for Learning English Vocabulary. *JET (Journal of English Teaching)*, 9(1), 70–82. <https://doi.org/10.33541/jet.v9i1.4506>
- Azlina A.Rahman, Zaleha Abdullah, Hasnah Mohamed, Baharuddin Aris, & Norasykin Mohd Zaid. (2014). Flipped Classroom: A New Paradigm in Secondary

- Education. *1st International Postgraduates Education Seminar (IEPS)*, November, 159–166.
- Basal, A., Yilmaz, S., Tanriverdi, A., & Sari, L. (2020). Effectiveness of Mobile Applications in Vocabulary Teaching. *Contemporary Educational Technology*, 7(1), 47–59. <https://doi.org/10.30935/cedtech/6162>
- Bani, M., & Masruddin, M. (2021). Development of Android-based harmonic oscillation pocket book for senior high school students. *JOTSE: Journal of Technology and Science Education*, 11(1), 93-103.
- BAŞAR, T., & ŞAHİN, L. (2022). Technology integration in teaching English as a foreign language: A content analysis study. *Journal of Educational Technology and Online Learning*, 5(1), 204–222. <https://doi.org/10.31681/jetol.972577>
- Basheer Nomass, B. (2013). The Impact of Using Technology in Teaching English as a Second Language. *English Language and Literature Studies*, 3(1), 111–116. <https://doi.org/10.5539/ells.v3n1p111>
- Baxter, P., & Jack, S. (2015). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, 13(4), 544–559. <https://doi.org/10.46743/2160-3715/2008.1573>
- Chen Hsieh, J. S., Wu, W. C. V., & Marek, M. W. (2017). Using the flipped classroom to enhance EFL learning. *Computer Assisted Language Learning*, 30(1–2), 1–21. <https://doi.org/10.1080/09588221.2015.1111910>
- Finochiaro. (2011). Vocabulary, Description, Acquisition and Pedagogy. [Online]. Available at: <http://www.phon.ucl.ac.uk/home/johnm/ptlc2005/pdf/ptlcp28.pdf> [December, 16, 2012].
- Jin, W., & Zhirui, D. (2017). Research on mobile learning model of college English based on WeChat platform. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(8), 5847–5853. <https://doi.org/10.12973/eurasia.2017.01034a>
- Jurgelaitis, M., Čeponienė, L., Čeponis, J., & Drungilas, V. (2019). Implementing gamification in a university-level UML modeling course: A case study. *Computer Applications in Engineering Education*, 27(2), 332–343. <https://doi.org/10.1002/cae.22077>
- Kaur, P. (2019). Kahoot! in The English Language Classroom. *South East Asia Journal of Contemporary Business, Economics and Law*, 20(6), 49–54.
- Khan, A., Egbue, O., Palkie, B., & Madden, J. (2017). Active learning: Engaging students to maximize learning in an online course. *Electronic Journal of E-Learning*, 15(2), 107–115.
- Klimova, B. (2021). Evaluating impact of mobile applications on EFL university learners' vocabulary learning - A review study. *Procedia Computer Science*, 184, 859–864. <https://doi.org/10.1016/j.procs.2021.03.108>
- Liu, M. (2014). The design of mobile learning system for English based on 3G platform. Proc. - IEEE Workshop Adv. Res. Technol. Ind. Appl., WARTIA, 767–770. <https://doi.org/10.1109/WARTIA.2014.6976383>
- Luo, Y. (2022). Analysis of Mobile Learning Model and Design of Mobile English Platform Based on Service-Oriented Architecture. *Mobile Information Systems*, 2022. <https://doi.org/10.1155/2022/3612420>
- Masruddin, M., & Nasriandi, N. (2022). Lexical and Syntactical Errors Performed by Junior High School Student in Writing Descriptive Text. *IDEAS: Journal on*

- English Language Teaching and Learning, Linguistics and Literature*, 10(1), 1094-1100.
- Mindog, E. (2016). Apps and EFL: A case study on the use of smartphone apps to learn English by four Japanese university students. *JALT CALL Journal*, 12(1), 3–22.
- Niño, A. (2015). Language Learners Perceptions and Experiences on the Use of Mobile Applications for Independent Language Learning in Higher Education. *IAFOR Journal of Education*, 3(SE). <https://doi.org/10.22492/ije.3.se.05>
- Orhan, A. (2023). Fake news detection on social media: the predictive role of university students' critical thinking dispositions and new media literacy. *Smart Learning Environments*, 10(1). <https://doi.org/10.1186/s40561-023-00248-8>
- Shang, Y. (2022). Functional Design and Model Development on Mobile Learning System of College English. In Meen T.-H. (Ed.), Proc. IEEE Int. Conf. Soc. Sci. Intell. Manag., SSIM (pp. 45–47). Institute of Electrical and Electronics Engineers Inc.; <https://doi.org/10.1109/SSIM55504.2022.10047931>
- Steel, C. (2012). Fitting learning into life: Language students' perspectives on benefits of using mobile apps. *ASCILITE 2012 - Annual Conference of the Australian Society for Computers in Tertiary Education, Clil*, 875–880.
- Sun, K. (2023). Research on User Behavior of College English Mobile Learning App. In Jan M.A. & Khan F. (Eds.), Lect. Notes Inst. Comput. Sci. Soc. Informatics Telecommun. Eng.: Vol. 467 LNICST (pp. 252–263). Springer Science and Business Media Deutschland GmbH; https://doi.org/10.1007/978-3-031-23944-1_28
- Ummul Muslikhum, U. (2019). *PROBLEMS FACED BY THE ELEVENTH GRADE STUDENTS IN SPEAKING SKILL AT PESANTREN MODERN DATOK SULAIMAN PUTRI PALOPO*, THE (Doctoral dissertation, Institut agama islam Negeri (IAIAN Palopo)).
- Zhang, X., Sun, J., & Deng, Y. (2023). Design and Application of Intelligent Classroom for English Language and Literature Based on Artificial Intelligence Technology. *Applied Artificial Intelligence*, 37(1). <https://doi.org/10.1080/08839514.2023.2216051>