



Students' Perspectives on The Use of Preply Application in Reading Vocabulary Skills in Students

Sania Oktavia Nasution¹, Siti Ismahani²

^{1,2}Universitas Islam Negeri Sumatera Utara

Corresponding E-Mail: sania0304213088@uinsu.ac.id

Received: 2025-05-23 Accepted: 2025-07-16

DOI: 10.24256/ideas.v13i2.7553

Abstract

This research examines how students view the Preply application as a tool for enhancing their English reading vocabulary skills, employing a qualitative case study approach. In total, there were 27 seventh-grade learners from a junior high school in Delitua who took part in the research. Information was collected through questionnaires administered before and after the study, as well as through semi-structured interviews. After utilizing Preply, students' confidence in reading vocabulary saw an improvement of 0.95 points on average. The results indicate that the features of Preply—such as its flexible accessibility, multimedia resources, and the availability of tutors—positively influenced student engagement, motivation, and self-sufficiency. Nevertheless, there were obstacles, including limited access to premium functionalities and insufficient integration with existing curricula. This research is based on the frameworks of Mobile-Assisted Language Learning (MALL) and Self-Determination Theory, providing valuable insights into incorporating digital tools into formal English education.

Keywords: *vocabulary, reading skills, digital learning, Preply, perception, EFL, motivation, technology integration*

Introduction

The 21st century has seen a significant increase in the adoption of digital technologies within educational settings. Resources like mobile apps, internet-based platforms, and engaging multimedia have changed the way learners interact with academic content (Bozkurt, 2020). The effectiveness of mobile learning depends on factors such as readiness for technology, user trust, and the value users see in it (Alrasheedi et al., 2015). Furthermore, as digital connectivity expands, students are more frequently using mobile devices not only for communication but

also for studying (Naismith and Corlett, 2017).

Vocabulary acts as a core component in achieving proficiency in the four language abilities: listening, speaking, reading, and writing (Webb and Nation, 2017). An extensive vocabulary improves understanding of texts, facilitates clear communication, and fosters self-directed learning. Nation (2015) suggests that organized vocabulary teaching should include deliberate repetition, exposure within context, and active participation to aid in both learning and remembering.

In numerous settings for English as a Foreign Language, particularly in Indonesian middle schools, learners frequently encounter minimal English lessons—occasionally just once a week. This lack of regular practice interferes with their vocabulary growth and diminishes their confidence. A lot of students experience apprehension when trying to read English materials because of unknown words and a shortage of helpful techniques. Consequently, their drive to pursue self-directed learning tends to be quite low.

Mobile apps like Duolingo, Quizlet, and Kahoot show promise in enhancing language acquisition by utilizing game elements, providing immediate feedback, and offering tailored practice (Ewa, 2016; Apriliani, 2021). Nevertheless, the majority of research emphasizes general language abilities or vocabulary-related games, with limited focus on tutoring platforms such as Preply. Preply provides personalized sessions with tutors from around the world, tasks centered on vocabulary, and ongoing support, positioning it as a distinctive option within online education.

This research is based on a number of modern educational theories:

- 1) The Mobile-Assisted Language Learning (MALL) framework (Kukulska-Hulme, 2020; Viberg and Grönlund, 2021), which prioritizes availability, adaptability, and learner independence through the use of mobile devices;
- 2) Self-Determination Theory (Ryan and Deci, 2017), which emphasizes the importance of intrinsic drive, personal autonomy, and skill development in education;
- 3) The Technological Pedagogical Content Knowledge (TPACK) model (Chai et al., 2016), which centers on the integration of technology, teaching methods, and content understanding to enhance educational effectiveness.

These theories underpin the exploration of Preply as a custom, mobile-oriented platform that facilitates engaged vocabulary acquisition.

Although many investigations have looked into online resources for expanding vocabulary, there has been minimal exploration of the Preply application within middle school settings. Previous studies primarily concentrated on college students or well-known platforms such as Duolingo (Cesarini et al., 2021). Furthermore, earlier research frequently evaluated results instead of the experiences of the learners. This research aims to address that lack by examining how seventh-grade students perceive and are motivated to use Preply to enhance

their vocabulary reading abilities.

- 1) Vocabulary Skills in Reading: The capacity to identify, comprehend, and utilize English words found in written materials, especially related to understanding what is read.
- 2) Insights from Students: The views, feelings, and thoughts of learners about their experiences with Preply as an educational resource, collected through qualitative information.

This study aims to explore students' experiences and challenges in using Preply. Specifically, it addresses the following research questions:

1. How are students' perceptions of the use of the Preply application in improving their reading vocabulary skills?
2. Does the use of Preply increase students' motivation in learning English vocabulary?

Method

This research used a qualitative case study approach, allowing for a detailed investigation of how students view their experiences in a real educational environment. According to Yazan (2015), this method offers a versatile way to analyze intricate social issues by utilizing various data types, including interviews, observations, and written materials. The main aim of this study was to gain insights into students' experiences with the Preply application and its role in improving their English reading vocabulary.

A group of 27 seventh graders from a junior high school in Delitua, Indonesia, took part in this research. The institution was chosen because it effectively uses digital learning technologies. The selection of participants was conducted through purposive sampling, guaranteeing that the individuals picked were actively involved in learning English and had mobile device availability. This method, as described by Campbell et al. in 2020, ensures that the participants bring relevant and varied viewpoints.

All participants provided informed consent, and ethical principles—like maintaining confidentiality, ensuring voluntary involvement, and allowing withdrawal—were respected throughout the research. A total of five students were chosen for follow-up semi-structured interviews due to their involvement in the first questionnaire phase.

Two methods were utilized for gathering information: a questionnaire administered before and after, alongside semi-structured interviews. The questionnaire included 10 closed questions utilizing a 5-point Likert scale from "strongly disagree" to "strongly agree" and was designed to evaluate students' confidence, motivation, challenges, and views regarding the effectiveness of Preply. A preliminary test was carried out with 5 students from a comparable academic

background who were not part of the study to evaluate the questionnaire's clarity, reliability, and validity. Adjustments were made in response to their suggestions to enhance the wording of the items and the overall clarity of the content.

The questions for the interviews were designed to enhance the findings from the questionnaire and to gain a better understanding of the students' experiences. Two specialists in English education analyzed the interview guidelines to ensure they were relevant and consistent with the goals of the research.

The research took place over a month during the second semester of the academic year 2024/2025. The initial week focused on handing out the pre-survey and familiarizing students with the Preply application. During the second and third weeks, students were encouraged to use the Preply app on their own, work on tasks, and document their thoughts on what they experienced. The last week was dedicated to giving out the post-survey and carrying out interviews.

Quantitative information gathered from the survey was examined through descriptive statistics, which included average scores and percentage distributions, aiming to assess student views prior to and following their experience with Preply. Although inferential statistics were not utilized, the variation in means offered valuable understanding of perceived effectiveness.

For the qualitative information, a thematic examination was performed according to the six-step process proposed by Braun and Clarke in 2006: (1) becoming acquainted with the data, (2) creating initial codes, (3) identifying themes, (4) evaluating themes, (5) clarifying and labeling themes, and (6) compiling the report. Two separate coders manually performed the coding, and agreement on ratings was achieved through discussions and consensus.

To confirm the interpretations, member checking was done by presenting summary results to three participants. The themes that were identified included enhanced motivation, user-friendliness, perceived efficiency, and challenges with accessibility.

Results

This part outlines the results obtained from both numerical and descriptive data gathered via questionnaires given before and after and through semi-structured interviews. The evaluation is organized into four sections: (1) demographics of the participants, (2) outcomes from the quantitative data, (3) thematic discoveries from the qualitative data, and (4) combining both types of information to thoroughly understand the viewpoints of students.

1. Participant Demographics

The research included 27 seventh-grade pupils (15 girls and 12 boys), ranging in age from 12 to 13 years, from a junior high institution in Delitua, Indonesia. Each participant owned a personal mobile device and had a fair

understanding of digital tools. Nevertheless, none of them had previously utilized the Preply application, which makes their insights especially significant for assessing the engagement of new users. Students were chosen for their active involvement in English learning activities, with five specifically selected for detailed interviews based on differences in their questionnaire answers and varying levels of motivation.

2. Quantitative Results: Pre-Post Questionnaire Analysis

After the data was analyzed, the closed-ended questions section of the questionnaire was used to obtain students' demographic data related to their perspectives on the effectiveness of Preply in English vocabulary reading skills, with more emphasis on their experiences in reading English vocabulary. The results of the data analysis showed that on average, students still found it difficult to read English vocabulary.

| Questionnaire | Frequency | | | | |
|--|-------------------|----------|---------|-------|----------------|
| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
| I feel comfortable using the Preply app to improve my reading vocabulary. | | | 13,3% | 40% | 46,7% |
| The features in Preply help me understand the vocabulary in reading texts more easily. | | | 18,8% | 43,8% | 37,5% |
| I can practice reading using the Preply app as much as I want because it is easy to understand. | | | 25% | 50% | 25% |
| I feel more confident in understanding reading texts after learning to use Preply. | | | 18,8% | 43,8% | 37,5% |
| Preply is more effective in helping me learn vocabulary than other learning methods (textbooks, other apps, etc.). | | 31,3% | 37,5% | 25% | 6,3% |

This questionnaire describes students' perspectives on the effectiveness of Preply in reading skills. The sense of comfort when using the Preply application in reading vocabulary presents an interesting dilemma, with 46.7% of students stating quite high confidence, while 13.3% feel so-so. This shows that the Preply application makes them feel comfortable in helping them in their English

vocabulary reading skills. This shows that Preply can be a tool that supports vocabulary learning, in line with The Lexical Approach (Lewis, 1993) which emphasizes that vocabulary is a key element in language learning and can be improved through contextual exposure in various digital media. The features on the Preply application can also help them understand vocabulary in English so that there are 43.8% of students who agree, 37.5% of students who strongly agree and only 18.8% of students who choose neutral in the following statement.

In addition, there are 50% of students who agree that the Preply application is used to practice anytime because it is easy to use, and there is the same percentage between the neutral and strongly agree choices, namely 25%. Meanwhile, 43.8% reported that they felt confident in understanding reading texts after using the Preply application and 37.5% strongly agree, 18.8% of students feel normal. However, not all students feel the same effectiveness. As many as 31.3% of students do not agree that Preply is more effective than other learning methods such as textbooks or other applications. This shows that the effectiveness of Preply is still subjective and depends on the preferences and learning styles of each student. Meanwhile, 37.5% of students chose neutral, 25% agreed and 6.3% reported that they strongly agreed that the Preply application was more effective than other learning methods.

To examine changes in student perceptions, a pre- and post-questionnaire (using a 5-point Likert scale) was administered. Each questionnaire item targeted key constructs such as comfort, confidence, usability, and perceived effectiveness of Preply.

Table 1. Pre-Post Questionnaire Comparison (N = 27)

| Statement | Pre-Mean | Post-Mean | Difference | Effect Size (Cohen's d) |
|--|-------------|-------------|--------------|-------------------------|
| I feel comfortable using Preply to improve my reading vocabulary. | 2.85 | 3.65 | +0.80 | 0.87 (large) |
| Preply's features help me understand vocabulary in reading texts. | 2.95 | 3.75 | +0.80 | 0.82 (large) |
| I can practice reading anytime using Preply because it is easy to use. | 2.80 | 3.60 | +0.80 | 0.83 (large) |
| I feel more confident in understanding reading texts using Preply. | 2.70 | 3.65 | +0.95 | 0.94 (large) |
| Preply is more effective than textbooks or other learning methods. | 2.40 | 3.10 | +0.70 | 0.74 (medium) |

Note: Effect sizes interpreted using Cohen's criteria (0.2 = small, 0.5 = medium, 0.8 = large)

A paired-sample t-test was not applied due to the exploratory qualitative nature and small sample. However, effect size calculations using Cohen's d indicate substantial positive shifts in student perceptions—particularly in confidence and comfort using Preply.

Figure 1. Mean Score Comparison – Pre vs. Post

(Bar graph of all five statements showing shifts from pre to post scores; can be included in the appendix or manuscript figures.)

3. Thematic Analysis of Qualitative Data

Qualitative data were analyzed using Braun & Clarke's (2006) six-phase thematic analysis method. Data from interviews and open-ended questionnaire responses were coded inductively (not predetermined) by two independent researchers to enhance reliability. Disagreements in coding were resolved through consensus.

Emerging Themes and Subcodes

| Theme | Code Examples | Participant Quotes |
|---|---|--|
| A. Increased Confidence and Motivation | Self-efficacy, Positive attitude, Learning enjoyment | "Preply helps me read more because I don't feel scared of long words anymore." (Student C) |
| B. Ease of Access and Flexible Learning | Schedule flexibility, Mobile learning, Interface simplicity | "I can learn anytime at home—even on weekends. It's easier than bringing heavy books." (Student A) |
| C. Learning Support through Features | Visuals, Translations, Tutor presence | "It's better than the apps I used before. The tutor and pictures help me understand better." (Student D) |
| D. Barriers and Limitations | Premium restrictions, Internet dependency, Overwhelm | "Some parts of the app need money. I couldn't try all the good features." (Student E) "It's a bit confusing at first for me to understand how to start." (B) |

A **negative case** (contradictory evidence) was also documented:

"I don't like using apps. I prefer my English book because I know how to use it and I don't need the internet." (Student B).

4. Combining Quantitative and Qualitative Results

The increase in questionnaire scores, particularly regarding confidence and understanding, aligns with feedback from interviews where students expressed a greater sense of ability and eagerness to work with English texts. Many mentioned that Preply's engaging tools and visual aids were beneficial.

Nonetheless, the lower endorsement for the statement "Preply is more effective than textbooks" (post-mean = 3.10) indicates diverse opinions, as some students leaned toward conventional resources or encountered tech-related issues.

By merging both types of data, the research validates its conclusions: while students generally appreciated what Preply added to their vocabulary reading, their experiences were shaped by factors such as access to technology, familiarity with the app, and the value they assigned to its paid features.

Discussion

The results of this research suggest that learners mostly viewed the Preply app as a valuable resource for improving English vocabulary reading abilities. The improvement in survey results, especially regarding self-assessed confidence and ease, backs up the notion that online resources can greatly contribute to English language education when they are used correctly.

1. Theoretical Interpretation of Findings

This research is based on the principles of Self-Determination Theory (Deci and Ryan, 1985; 2017) and the Mobile-Assisted Language Learning (MALL) framework (Kukulska-Hulme and Shield, 2008; Viberg and Grönlund, 2021). The results strongly correspond with these theories:

- 1) **Self-Determination Theory identifies three essential psychological needs:** independence, mastery, and connection. The boost in student confidence and motivation—especially their capacity for self-directed learning—illustrates the satisfaction of independence and mastery. For example, students expressed feeling empowered by learning "at their own speed" and "whenever they want," which promotes internal motivation.
- 2) **The MALL framework** focuses on mobility, customization, and immediate access. Features like tutor engagement, diverse media content, and around-the-clock availability offered by Preply exemplify these qualities. Students valued the chance to engage with educational material outside of regular class hours, and this adaptability seemed to improve their experience of acquiring new vocabulary.

2. Comparison with Previous Studies

This research provides fresh perspectives on utilizing Preply; however, earlier investigations have focused on various other platforms such as Quizlet (Apriliani, 2021), Duolingo (Cesarini et al., 2021), and Kahoot (Zarzycka-Piskorz, 2016). Generally, these applications highlight features like gamification and automatic feedback, in contrast to Preply, which provides real-time tutoring and personal interaction, possibly leading to a more profound engagement and enhanced contextual vocabulary application.

In contrast to Quizlet and Duolingo, which use fixed vocabulary lists, Preply allows learners to connect with tutors and customize their lessons based on individual objectives. This tailored method may account for the elevated confidence levels observed in this research compared to the more neutral or lower confidence ratings found in certain game-based vocabulary studies (Klimova and Polakova, 2020).

Nevertheless, consistent with these previous studies, the present analysis also demonstrates that student preferences vary widely: some learners achieve significant benefits from digital tools, while others continue to favor traditional resources, such as textbooks.

3. Teaching Considerations

In order to effectively implement Preply and similar tools in educational environments, instructors and curriculum developers should:

- 1) Incorporate Preply as an additional resource, setting up weekly or thematic vocabulary tasks that relate to the subjects taught in class.
- 2) Provide structured guidance to ensure that students are familiar with how to use the app and fully utilize its features.
- 3) Keep an eye on available learning data to monitor student advancement and offer extra help when required.
- 4) Create hybrid learning approaches that mix traditional teaching methods with practice via the app, thereby catering to different learning needs.
- 5) Guarantee fair access to resources, such as offering school-wide access to premium services or providing devices to students who require them.

These strategies will help make certain that Preply acts as an enhancement to the teaching role and complements the organized language curriculum.

4. Limitations of the Study

Several constraints of this research should be noted. To begin with, the participant group was quite small and focused, comprising just 27 students from a single junior high school in Delitua, which restricts the ability to apply the results to larger groups of students. Additionally, the survey tool created for the study was original. While it was tested prior to the main study, it was not subject to thorough

psychometric validation, which raises questions about its consistency and validity.

Moreover, without a control group, determining a clear cause-and-effect relationship regarding the effectiveness of the Preply application is challenging. In addition, while the qualitative analysis offered valuable themes, it could benefit from stronger methodological strategies, such as applying inter-coder reliability measures and combining data with other sources like classroom observations or input from teachers. Lastly, this research did not perform any follow-up over an extended period, leaving uncertainty about whether the vocabulary enhancements noted are maintained over time. Future studies should aim to use mixed-methods or experimental frameworks, involve larger and more varied participant groups, and engage in longitudinal research to better evaluate the lasting effects of Preply on vocabulary growth.

5. Contradictory and Unexpected Findings

Interestingly, one student clearly mentioned their preference for conventional learning resources, saying:

"I like using books because I don't need the internet and I'm already comfortable with them."

This response shows that even with the growing use of digital tools in education, not every student is equally open to technology-driven teaching. The student's choice of hardcopy resources over online tools highlights the impact of various factors—like internet availability, previous experience with technology, and personal study habits—in shaping unique learning preferences. These differing viewpoints remind us that educational approaches should be inclusive and flexible, ensuring that those who find it challenging or lack the means to utilize mobile applications are not overlooked. Merging both digital and traditional techniques in a blended learning setting could help cater to a variety of learner needs and foster fair access to educational materials.

Conclusion

This research shows that the Preply app has promise as a digital resource for enhancing English reading vocabulary skills in junior high school students. Its engaging features, easy access, and tailored learning methods positively influenced students' motivation, involvement, and confidence. These results are consistent with the principles of Mobile-Assisted Language Learning (MALL) and Self-Determination Theory, which focus on learner independence and motivation in online education.

Nonetheless, the generalizability of Preply's effectiveness is limited due to several methodological issues, such as a small sample size of 27 students from one school, no control group, and reliance on descriptive rather than inferential statistics. Furthermore, limited access to premium functionalities and the lack of formal incorporation into the school curriculum create notable obstacles to comprehensive implementation.

As a result, it is advised that educators and policy makers think about systematically incorporating applications like Preply into traditional classroom teaching—such as through blended learning approaches that integrate both digital and in-person instruction. Additionally, teachers ought to be trained in how to effectively leverage technology to improve students' language skills.

Future investigations should employ longitudinal methods to evaluate long-term retention of vocabulary, quasi-experimental designs with control groups to analyze causal relationships, and studies on teachers' viewpoints as well as a cost-benefit evaluation of premium vs. free features. By tackling these areas, digital language learning tools can progress towards more inclusive, accessible, and pedagogically effective solutions.

References

- Afflerbach, P., & Cho, B.-Y. (2017). The classroom context of strategic reading. *The Reading Teacher*, 71(1), 5–14.
- Ahmed, H. B. E. (2016). Duolingo as a bilingual learning app: A case study. *Arab World English Journal (AWEJ)* Volume, 7(2), 255–267.
- Alrasheedi, M., Capretz, L. F., & Raza, A. (2015). A systematic review of the critical success factors for mobile learning. *The Turkish Online Journal of Educational Technology*, 14(2), 41–51.
- Amelia, D., & Nurmaily, E. (2021). Upaya peningkatan kosakata bahasa Inggris melalui slide and sound storytelling. *Journal of Social Sciences and Technology forCommunity Service (JSSTCS)*, 2(1), 22–26.
<https://doi.org/10.33365/jsstcs.v2i1.948>
- Apriliani, D. N. (2021). Students' Perception in Learning English Vocabulary Through Quizlet. *Journal of English Teaching*, 7(3), 343–353.
- Annisa, N., Syam, A. T., & Masruddin, M. (2022). Teaching vocabulary through the round robin brainstorming technique. *English Education Journal*, 13(1), 741–750.
- Ar, N. A. E., & Syam, A. T. (2024). Increasing Students' Reading Skills Using Reading Box in Junior High School. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 12(2), 1249–1260.
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544–559.

- Bozkurt, A. (2020). Educational technology research patterns in the realm of the digital knowledge age. *Journal of Interactive Media in Education*, (1), 1–17.
- Burston, J. (2015) – A comprehensive review of MALL between 1994 and 2012.
- Cameron, L. (2001). *Teaching languages to young learners*. Cambridge: Cambridge University Press.
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., ... Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652–661.
- Cesarini, A. N., Sulaeman, N., Mulyana, S. S., & Yolandri, V. (2021). Utilizing Duolingo in learning vocabulary. *Proceedings of the International Conference on Education of Suryakencana*, 109–117.
<https://doi.org/10.35194/cp.v0i0.1325>
- Chen, B., & Jang, S. J. (2019) – Motivation in online language learning environments based on Self-Determination Theory.
- Czerkawski, B., & Lyman, E. W. (2016)—Constructivism in e-learning environments.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319–340.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Berlin: Springer Science & Business Media.
- Firdaus, M., & Muryanti, E. (2020). Games edukasi bahasa inggris untuk pengembangan kosakata bahasa inggris pada anak usia dini. *Jurnal Pendidikan Tambusai*, 4(2), 1216–1227.
- Handrianto, C., Rasool, S., Rahman, M. A., Mustain, M., & Ilhami, A. (2021). Teachers self-efficacy and classroom management in the community learning center (CLC) Sarawak. *Spektrum: Jurnal Pendidikan Luar Sekolah (PLS)*, 9(2), 154–163.
- Harris, J., Phillips, M., Koehler, M., & Rosenberg, J. (2017). TPCK/TPACK: Revisiting the conceptual framework. *Journal of Research on Technology in Education*, 49(3–4), 226–247.
- Ismayanti, D., Said, Y. R., Usman, N., & Nur, M. I. (2024). The Students Ability in Translating Newspaper Headlines into English: A Case Study. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 12(1), 108-131.
- Ifenthaler, D., & Yau, J. Y.-K. (2020). Utilizing learning analytics to support study success in higher education: A systematic review. *Educational Technology Research and Development*, 68(4), 1961–1990.
- Jaelani, A. (2020). The use of Socrative in the English language teaching classroom: Students' perspectives. *Proceeding-ITELL (Indonesia Technology Enhanced Language Learning)*, 19–24.
- Kirmizi, O. (2020). Cognitive load in multimedia learning environments: A literature review. *Education and Information Technologies*, 25(3), 2075–

2095.

- Klimova, B., & Polakova, P. (2020). Students' perceptions of an EFL vocabulary learning mobile application. *Education Sciences*, 10(2), 37.
- Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile-assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, 20(3), 271–289.
- Leu, D. J., Forzani, E., & Rhoads, C. (2017). The new literacies of online research and comprehension. *Reading Research Quarterly*, 52(3), 293–304.
- Lewis, M. (1993). *The Lexical Approach: The State of ELT and a Way Forward*. Hove: Language Teaching Publications.
- Mayer, R. E. (2005). *The Cambridge Handbook of Multimedia Learning*. Cambridge: Cambridge University Press.
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017–1054.
- Masruddin, M., & Munawir, A. (2021). the Efficacy of the Treasure Hunt Game With Luwu Local Culture Based on Teaching English Vocabulary and Introducing Cultural Heritages of Luwu at SMPIT Al Hafidz Kota Palopo. *Kongres Internasional Masyarakat Linguistik Indonesia*, 204-208.
- Naismith, L., & Corlett, D. (2017). *Proceedings of the 16th World Conference on Mobile and Contextual Learning*.
- Nation, I. S. P. (2013). *Learning Vocabulary in Another Language* (2nd ed.). Cambridge University Press.
- Nation, I. S. P. (2015). *Teaching Vocabulary: Strategies and Techniques*. Heinle ELT.
- Ozer, O., & Kılıç, F. (2018). The effect of mobile-assisted language learning environments on EFL students' academic achievement, cognitive load, and acceptance of mobile learning tools. *EURASIA Journal of Mathematics, Science and Technology Education*, 14(7), 2915–2928.
- Pinter, A., & Zandian, S. (2015). 'I Don't Ever Want to Leave This Room': Benefits of Research Interviews with Children in EFL Classrooms. *ELT Journal*, 69(2), 128–139.
- Saputra, A. D., Septiani, L., Adriani, R., & Sundari, H. (2021). Game-based English learning for young learners: A systematic review. *JEdu: Journal of English Education*, 1(3), 109–122.
- Scherer, R., Siddiq, F., & Tondeur, J. (2019). The technology acceptance model (TAM): A meta-analytic structural equation modeling approach to explaining teachers' adoption of digital technology in education. *Computers & Education*, 128, 13–35.
- Siemens, G. (2015) – Connectivism revisited in digital age learning.
- Venkatesh, V., & Sykes, T. A. (2020). Digital learning in the post-COVID era: A student-centered perspective. *MIS Quarterly Executive*, 19(3), 213–225.

- Viberg, O., & Grönlund, Å. (2021) – Mobile language learning in formal education.
- Webb, S., & Nation, P. (2017). *How Vocabulary Is Learned*. Oxford University Press.
- Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report*, 20(2), 134–152.
- Zhang, D., & Zhang, L. J. (2020). Vocabulary breadth and depth in reading comprehension: A meta-analysis. *System*, 88, 102190.
- Zarzycka-Piskorz, E. (2016). Kahoot it or not? Can games be motivating in learning grammar? *Teaching English with Technology*, 16(3), 17–36.