The Effectiveness of Wordwall as a Digital Learning Media in Teaching Reading Comprehension at SMA Negeri 1 Grogol Kediri

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ABSTRACT

Reading comprehension is an important skill for English learners because it allows them to grasp written materials, identify core ideas, find specific information, and successfully interpret meaning. However, many students continue to struggle with understanding English texts due to a lack of vocabulary, low motivation, and monotonous teaching techniques. The purpose of this study was to investigate whether or not the Wordwall program is successful in teaching reading comprehension to tenth-grade students at SMA Negeri 1 Grogol Kediri. This study used a pre-experimental research design with one-group pre- and post-tests. The sample included 32 pupils from class X-10. Multiple-choice reading comprehension questions were utilized as pre- and post-tests in the study. The data were examined via descriptive statistics and the Wilcoxon Signed-Rank Test. The results revealed that the students' mean pre-test score was 53.44, indicating that their reading comprehension ability was rather low prior to therapy. Following the introduction of Wordwall, the post-test mean score climbed dramatically to 89.53. The statistical analysis revealed that the Asymp. Sig. (2-tailed) value was 0.000, which was less than 0.05, indicating a significant difference between pre-test and post-test scores. As a result, the Wordwall program was found to greatly improve students' reading comprehension and can be deemed an effective digital learning medium in English reading instruction.

Keywords: digital learning media, reading comprehension, senior high school students, English teaching, Wordwall.

INTRODUCTION

Reading is widely recognized as one of the most important skills in English language learning, particularly for students who study English as a Foreign Language (EFL). This skill plays a significant role in enabling learners to obtain information, expand their vocabulary, recognize grammatical patterns, and improve their overall language proficiency. Reading activities are designed to help students interpret written material,

link concepts, and generate meaning from books. In academic settings, reading serves as a basis for developing other language abilities such as writing, speaking, and listening. Grabe & Stoller (2020) explain how reading is a complicated cognitive process involving both the decoding of written symbols and the comprehension of meaning. In line with this view, Kendeou et al. (2016) emphasize that reading comprehension requires readers to process explicit information, make logical inferences, and integrate textual ideas in order to achieve complete understanding. For this reason, reading comprehension is considered an essential competence that senior high school students need to master.

Within the Indonesian senior high school curriculum, reading comprehension is categorized as a core competency that students are expected to achieve. Learners are expected to comprehend several types of texts, including descriptive, narrative, recount, report, and analytical exposition texts. The ability to comprehend written texts is highly valuable because it supports students in completing academic tasks, understanding instructional materials, and developing critical thinking skills. Furthermore, in today's information-driven era, students are increasingly expected to access and evaluate knowledge through written sources. This condition highlights the necessity of implementing effective teaching strategies and instructional media that can facilitate students' reading comprehension development.

Despite the importance of reading comprehension, many students continue to encounter substantial difficulties in understanding English texts. They often struggle to determine the main idea, identify detailed information, interpret unfamiliar vocabulary based on context, and draw conclusions from reading passages. These difficulties may result from several factors, including inadequate vocabulary mastery, limited grammatical knowledge, insufficient background knowledge, and low motivation toward reading activities. ALQAHTANI (2015) states that vocabulary knowledge is one of the most influential elements affecting reading comprehension achievement. Likewise, Aida et al. (2021) found that students frequently face challenges in identifying supporting details and comprehending information presented in written texts. These findings indicate that reading comprehension remains a major concern in English language learning at the secondary education level.

Preliminary observations conducted during the *Pengenalan Lapangan Persekolahan* (PLP) program at SMA Negeri 1 Grogol Kediri revealed that many tenth-

grade students showed low interest and minimal participation during reading lessons. The teaching and learning process was still largely dominated by conventional instructional methods, particularly textbook-based learning and teacher-centered explanations. Such approaches often placed students in passive roles, limiting their opportunities to interact actively with reading materials. In many cases, the students tended to translate texts word by word instead of attempting to understand the overall meaning of a passage. This habit made reading activities less efficient and reduced students' engagement. In addition, monotonous classroom practices contributed to students' lack of enthusiasm during reading instruction. These classroom conditions demonstrate the urgent need for innovative teaching media capable of creating more interactive and meaningful learning experiences.

Innovative teaching media have become increasingly important in modern education as the advancement of educational technology provides significant opportunities to enhance classroom learning through the integration of digital platforms. Technology-based learning media can create more engaging, flexible, and student-centered learning environments. One interactive digital platform that has gained considerable attention in educational contexts is Wordwall. Wordwall is an educational application that enables teachers to design various interactive learning activities, including quizzes, matching tasks, games, and puzzles. This platform allows instructional materials to be presented in attractive formats that encourage active student participation. Wang & Tahir (2020) argue that game-based learning environments can increase students' motivation and improve learning performance. In the context of this research, Wordwall was applied using several activity templates, such as *Complete the Sentence*, *Quiz*, and *Match Up*, to support students' reading comprehension through engaging and interactive exercises.

The implementation of Wordwall is strongly connected to constructivist learning theory emphasizes that knowledge is built through active participation and meaningful engagement with learning events. According to this perspective, students learn more effectively when they are directly involved in processing information, solving tasks, and receiving immediate feedback. Interactive learning activities provided through Wordwall encourage students to analyze textual information, collaborate with peers, and evaluate their own understanding. Such active involvement is expected to

strengthen students' comprehension skills and facilitate deeper understanding of reading materials.

A number of previous studies have provided empirical evidence regarding the effectiveness of Wordwall in English language teaching. Rahmawati & Wijayanti (2022) reported that students showed improvement in reading comprehension after learning activities using Wordwall. Swari (2023)) found positive changes in students' reading motivation and confidence after the implementation of Wordwall. In addition, Fitria & Agustin (2025) reported that students who learned through Wordwall achieved higher reading comprehension scores than those who learned through traditional instructional approaches. These studies suggest that Wordwall is capable of promoting a more interactive learning atmosphere while simultaneously improving students' academic performance.

Although numerous studies have investigated the effectiveness of Wordwall in English language instruction, research focusing specifically on its impact on reading comprehension among tenth-grade students at SMA Negeri 1 Grogol Kediri remains limited. Most existing studies have examined broader English learning outcomes or were conducted in different educational contexts. This limitation indicates a research gap that needs to be addressed through further investigation in this specific setting.

Based on the issues identified above, this study aims to examine students' improvement in reading comprehension after the implementation of Wordwall among tenth-grade students at SMA Negeri 1 Grogol Kediri. More specifically, the study seeks to identify students' reading comprehension performance before and after the implementation of Wordwall and to investigate whether there are significant changes in students' reading comprehension scores.

This study is expected to contribute both theoretically and practically. From a theoretical standpoint, the study contributes to the body of information regarding the use of digital learning media in English language teaching, particularly reading comprehension instruction. Practically, the findings are likely to generate value. insights for English teachers in selecting effective instructional tools to improve students' reading achievement. Moreover, this study may serve as a useful reference for future researchers who intend to explore the implementation of digital learning platforms in EFL classrooms.

METHODS

Research Design

This study employed a quantitative research method using a pre-experimental one-group pre-test–post-test design. The design was selected to examine students' improvement in reading comprehension before and after the implementation of Wordwall as a digital learning medium. Quantitative research is commonly used to measure changes in participants' performance through numerical data and statistical analysis Creswell (2012).

The one-group pre-test–post-test design was employed as an appropriate approach to evaluate students' learning improvement in a natural classroom context where only one intact class was available. In addition, the design was considered suitable for providing preliminary evidence regarding the effectiveness of Wordwall in improving students' reading comprehension. According to ARY (2019), a one-group pre-test–post-test design is appropriate when researchers seek to measure changes in a single group following an intervention.

In this design, students completed a pre-test before the implementation of Wordwall and a post-test after the treatment. The comparison of pre-test and post-test scores allowed the researcher to identify changes in students' reading comprehension during the intervention period Fraenkel et al. (2019). Therefore, the focus of this study was not to establish broad causal relationships but to investigate students' improvement in reading comprehension following the implementation of Wordwall.

Population and Sample

The population of this study consisted of all tenth-grade students at SMA Negeri 1 Grogol Kediri. The sample was one intact class (Class X-10) consisting of 32 students, selected through purposive sampling. This class was chosen based on preliminary classroom observations, which indicated that students experienced difficulties in reading comprehension, particularly in identifying main ideas, understanding supporting details, and interpreting vocabulary in context. The class was also considered suitable for the implementation of digital learning media due to students' access to learning devices and internet connectivity.

Research Instrument

The research instrument used in this study was a reading comprehension test consisting of 20 multiple-choice items based on descriptive and recount texts aligned with the tenth-grade English curriculum. Each item provided four answer options (A, B, C, and D), with one correct answer. Each correct response was awarded five points, resulting in a maximum score of 100.

The test measured several reading comprehension skills, including identifying main ideas, finding specific information, understanding vocabulary in context, making inferences, determining references, and recognizing text structure. To establish content validity, the test items were developed based on the learning objectives and the tenth-grade English curriculum and were reviewed by an English teacher and a university lecturer through expert judgment. The reliability of the instrument was examined using Cronbach's Alpha to determine the internal consistency of the test items. The analysis yielded a Cronbach's Alpha coefficient of 0.796 for, the pre-test and 0.851 for the post-testindicating that the instrument had acceptable reliability for educational research.

The pre-test and post-test consisted of different items; however, both tests were constructed based on the same test specifications, reading skills, text types, and level of difficulty to ensure equivalence and comparability of scores while minimizing testing bias. In addition, both tests employed the same scoring system and assessment criteria.

To strengthen internal validity in the absence of a control group, consistent instructional procedures, learning materials, teaching duration, and assessment conditions were maintained throughout the study. The same teacher conducted all instructional sessions, and both the pre-test and post-test were administered under identical conditions, including the same classroom environment, instructions, time allocation, and scoring procedures.

Research Procedure

The research procedure consisted of four stages: preparation, pre-test, treatment, and post-test. During the preparation stage, the researcher developed lesson plans, reading materials, assessment instruments, and Wordwall-based activities. The

researcher also ensured that students were familiar with the Wordwall platform and that technical requirements were met.

The pre-test was administered before the treatment to measure students' initial reading comprehension ability. Students completed the test individually under standardized classroom conditions.

The treatment stage was conducted in three meetings, each lasting 2 × 45 minutes. During this stage, students learned reading materials through interactive Wordwall activities, including Quiz, Match Up, and Complete the Sentence templates. The activities were designed to promote active engagement, immediate feedback, and repeated practice of reading comprehension skills. Instructional materials, teaching duration, and teacher guidance were kept consistent across all meetings.

The post-test was administered after all treatment sessions were completed. The post-test was conducted under the same conditions as the pre-test to ensure consistency. The results were then compared to evaluate students' improvement in reading comprehension.

Data Analysis

Data were analyzed using SPSS version 27. Descriptive statistics were used to calculate the mean, minimum score, maximum score, and standard deviation of students' pre-test and post-test results.

The Shapiro–Wilk test was applied to examine data normality. Since the data were not normally distributed, the Wilcoxon Signed-Rank Test was employed to analyze the difference between pre-test and post-test scores. The significance level was set at 0.05.

In addition to statistical significance testing, effect size was calculated to determine the magnitude of the treatment effect and to provide a more comprehensive interpretation of the findings. The effect size was computed using the formula $r = \frac{|Z|}{\sqrt{N}}$, where Z represents the Wilcoxon test statistic and N represents the total number of participants. Based on the test result (Z = -4.948) and the number of participants (N = 32), the effect size was calculated as:

$$r = \frac{4.948}{\sqrt{32}} = \frac{4.948}{5.657} = 0.875$$

The obtained effect size (r = 0.875) was interpreted based on Cohen's criteria, where 0.10 indicates a small effect, 0.30 indicates a medium effect, and 0.50 or higher indicates a large effect. Therefore, the result indicates a large effect size, suggesting that the implementation of Wordwall had a strong impact on improving students' reading comprehension. This additional analysis strengthens the interpretation of the findings, particularly because the study employed a one-group pre-test–post-test design without a control group.

Limitations of the Study

Due to the use of a one-group pre-test–post-test design, the findings of this study should be interpreted as evidence of learning improvement within the studied context rather than broad causal generalization. The study was conducted in one intact class of tenth-grade students at SMA Negeri 1 Grogol Kediri. Therefore, the findings may reflect the characteristics of this particular group and educational setting. In addition, the implementation of Wordwall was influenced by practical classroom conditions, including students' access to digital devices, internet connectivity, and the relatively short intervention period of three instructional meetings. Consequently, the results provide insight into changes in students' reading comprehension during the implementation of Wordwall, while further research involving larger samples, longer intervention periods, and comparison groups would be valuable for extending understanding across different contexts.

RESULTS AND DISCUSSION

Results

This section presents the findings of the study regarding the effect of the Wordwall application on students' reading comprehension achievement among the tenth-grade students at SMA Negeri 1 Grogol Kediri. The data were obtained from the pre-test and post-test scores administered before and after the implementation of the treatment.

The descriptive analysis showed a significant improvement in students' reading comprehension achievement after the implementation of Wordwall. Before the treatment, the students' average score in the pre-test was relatively low, indicating that many students still had difficulties in understanding reading texts, identifying the main idea, finding specific information, understanding vocabulary in context, and interpreting

the meaning of the text. However, after receiving treatment using Wordwall-based learning activities, students demonstrated a considerable increase in their reading comprehension performance. The comparison between the pre-test and post-test mean scores is presented in Table 1.

Table 1. Comparison of Students' Pre-test and Post-test Mean Scores

Descriptive Statistics					
	N	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
pre_test	*32*	*15*	*90*	*54,22*	*22,758*
post_test	*32*	*35*	*100*	*78,75*	*20,984*
Valid N (listwise)	*32*				

Based on Table 1, the mean score of the pre-test was 54.22, while the mean score of the post-test was 78.75. This indicates an improvement of 24.53 points after the implementation of Wordwall. The increase suggests that students achieved better reading comprehension performance after receiving instruction through the Wordwall application. To provide a clearer picture of students' improvement, the distribution of pre-test and post-test scores is presented in Figure 2.

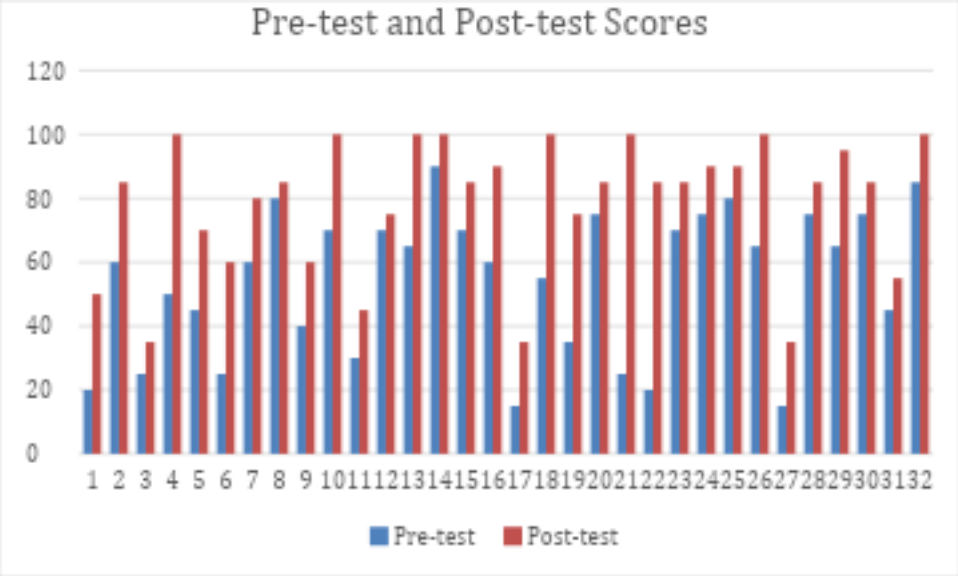

Figure 2. Distribution of Students' Pre-test and Post-test Scores

Figure 2 illustrates a clear shift in students' score distribution from lower score ranges in the pre-test to higher score ranges in the post-test. In the pre-test, most students obtained scores within the lower achievement categories, indicating limited reading comprehension ability. In contrast, the post-test results show that most

students achieved scores in the higher categories, reflecting considerable improvement after the treatment. This shift demonstrates that the implementation of Wordwall contributed positively to students' reading comprehension development.

To determine whether the improvement was statistically significant, the Wilcoxon Signed-Rank Test was conducted. The result is presented in Table 2.

Table 2. Wilcoxon Signed-Rank Test Result

Test Statistics[a]	
	post_test - pre_test
Z	-4,948[b]
Asymp. Sig. (2-tailed)	,000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

The Wilcoxon Signed-Rank Test showed that the Asymp. Sig. (2-tailed) value was 0.000, which was lower than the level of significance 0.05 (0.000 < 0.05). In addition, the Z value was -4.948. Since the significance value was lower than 0.05, the null hypothesis (H_0) was rejected and the alternative hypothesis (H_a) was accepted.

It means that there was a significant difference between students' pre-test and post-test scores after the implementation of the Wordwall application. It can be concluded that the use of Wordwall is effective to teach reading as students' reading comprehension of the tenth-grade students at SMA Negeri 1 Grogol Kediri was improved significantly.

Classroom observations during the treatment sessions also revealed positive changes in students' participation and engagement. The students became more active and enthusiastic in completing reading activities through interactive features such as quizzes, matching tasks, and sentence-completion exercises. This increased participation indicates that Wordwall created a more interactive and motivating learning environment that supported students' reading comprehension improvement.

Discussion

The findings of this study indicate that students' reading comprehension scores improved after the implementation of Wordwall. This was evidenced by the increase in post-test scores compared to pre-test scores and supported by the result of the

Wilcoxon Signed-Rank Test, which showed an Asymp. Sig. (2-tailed) value of 0.000, lower than the significance level of 0.05. In addition, the effect size analysis revealed a large effect (r = 0.875), indicating a strong improvement in students' reading comprehension performance during the intervention period. However, since this study employed a one-group pre-test–post-test design without a control group, the findings should be interpreted as improvement within the classroom context rather than definitive evidence of causality.

One possible explanation for this improvement is the interactive and game-based nature of Wordwall, which encouraged students to engage more actively in reading activities. During the treatment sessions, students participated in quizzes, matching tasks, and comprehension exercises that required them to interact directly with the reading texts. These activities may have facilitated students' ability to identify main ideas, locate specific information, and understand vocabulary in context. This is consistent with Grabe & Stoller (2020), who emphasize that reading comprehension involves active meaning construction through engagement with texts.

In addition, the improvement may also be influenced by increased student motivation and the novelty effect. Because Wordwall was a new learning medium for many students, they may have shown higher enthusiasm and attention during the learning process, which could temporarily enhance their performance. This aligns with Wang & Tahir (2020), who highlight that game-based learning environments can increase student motivation and participation, particularly in the early stages of implementation.

Another contributing factor may be repeated exposure to similar task formats during the treatment sessions. Students became more familiar with the types of questions and reading tasks used in both the learning activities and post-test, which may have improved their test-taking strategies and performance. This phenomenon, known as test familiarity or practice effect, may have partially contributed to the higher post-test scores.

The immediate feedback feature provided by Wordwall may also have supported students' learning process by allowing them to recognize and correct their mistakes instantly. However, it is important to acknowledge that the observed improvement cannot be attributed solely to the use of Wordwall. Other factors such as teacher guidance, repeated exposure to reading materials, classroom interaction, and general

practice effects may also have contributed to the improvement between pre-test and post-test scores.

Furthermore, the absence of a control group limits the ability to isolate the specific effect of Wordwall on students' reading comprehension. Therefore, while the statistical results indicate a significant and large improvement, the findings should be interpreted cautiously in terms of causality.

The findings of this study are generally consistent with previous research. Rahmawati & Wijayanti (2022) reported improvements in students' reading comprehension after the implementation of Wordwall-based activities, while Swari (2023) found increased student engagement during reading lessons using Wordwall. Similarly, Fitria & Agustin (2025) reported positive outcomes in reading instruction supported by Wordwall. The consistency between the present study and previous findings suggests that Wordwall has potential as an effective instructional tool for supporting reading comprehension and classroom engagement in EFL contexts.

CONCLUSION

This study was conducted to investigate whether the use of the Wordwall application was effective in teaching reading comprehension to the tenth-grade students of SMA Negeri 1 Grogol Kediri. The findings showed that the students' reading comprehension achievement improved after the implementation of Wordwall during the treatment period. This improvement was reflected in the increase in the mean score from 54.22 in the pre-test to 78.75 in the post-test. Furthermore, the result of the Wilcoxon Signed-Rank Test indicated a statistically significant difference between the pre-test and post-test scores (Asymp. Sig. (2-tailed) = 0.000 < 0.05).

Based on these findings, it can be concluded that the implementation of Wordwall was effective in improving the reading comprehension of the tenth-grade students who participated in this study at SMA Negeri 1 Grogol Kediri during the research period. However, due to the use of a one-group pre-test–post-test design without a control group, the findings should be interpreted within the context of this study and should not be generalized beyond the participants involved.

The findings suggest that Wordwall may serve as a useful instructional medium for reading activities in English classrooms. Future researchers are encouraged to conduct similar studies with larger samples, different educational levels, and

experimental or quasi-experimental designs involving control groups to provide stronger evidence regarding the effectiveness of Wordwall in English language teaching. Future studies may also explore the effectiveness of various Wordwall templates in improving reading comprehension and other English language skills.

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REFERENCES

Aida, A. (2021). STUDENTSâ€™ DIFFICULTIES IN READING COMPREHENSION AT THE EIGHT GRADE STUDENTS OF SMPN 22 KOTA JAMBI. *JR-ELT (Journal of Research in English Language Teaching)*, *5*(1), 1-11.

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

Brown, H. D. (2014). *Principles of language learning and teaching* (6th ed.). Pearson Education.

Creswell, J. W. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Duke, N. K., & Cartwright, K. B. (2021). The Science of Reading Progresses: Communicating Advances Beyond the Simple View of Reading. *Reading Research Quarterly*, *56*(S1), S25–S44. https://doi.org/10.1002/rrq.411

Fitria, W., & Agustin, D. (2025). Wordwall Platform and Its Effect on Students' Reading Comprehension. *ENGLISH FRANCA: Academic Journal of English Language and Education*, *9*(1 May), 163–172. https://doi.org/10.29240/ef.v9i1

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2019). *How to design and evaluate research in education* (10th ed.). McGraw-Hill Education.

Grabe, W., & Stoller, F. L. . (2020). *Teaching and researching reading*. Routledge.

Harmer, J. (2015). *The practice of English language teaching* (5th ed.). Pearson Education.

Kendeou, P., Mcmaster, K. L., & Christ, T. J. (2016). *Reading Comprehension : Core Components and Processes*. https://doi.org/10.1177/2372732215624707

Kurniawan, A., & Putri, S. A. (2022). Digital media integration in EFL classrooms: Challenges and opportunities. *Journal of English Education Studies, 5*(2), 89–101.

Language, E., Vol, T. J., Sulthan, U. I. N., & Saifuddin, T. (2021). *STUDENTS ' DIFFICULTIES IN READING COMPREHENSION AT THE EIGHT GRADE STUDENTS OF SMPN 22 KOTA JAMBI*. *5*(1), 1–11.

Nation, I. S. P. (2013). *Learning vocabulary in another language* (2nd ed.). Cambridge University Press.

Prensky, M. (2010). *Teaching digital natives: Partnering for real learning*. Corwin Press.

Rahmawati, A. P., & Wijayanti, P. R. (2022). Implementing Joyful Learning Strategy Using Wordwall in Order to Improve Reading Comprehension Skills. *Proceedings Series on Physical & Formal Sciences*, *3*(2001), 32–35. https://doi.org/10.30595/pspfs.v3i.261

Slavin, R. E. (2018). *Educational psychology: Theory and practice* (12th ed.). Pearson.

Swari, N. K. T. A. (2023). Wordwall As a Learning Media To Increase Students' Reading Interest. *Jurnal Pendidikan Bahasa Inggris Indonesia*, *11*(1), 21–29. https://doi.org/10.23887/jpbi.v11i1.1572

Tarigan, H. G. (2015). *Membaca sebagai suatu keterampilan berbahasa*. Angkasa.

Wang, A. I., & Tahir, R. (2020). The effect of using Kahoot! for learning – A literature review. *Computers and Education*, *149*(May 2019), 103818. https://doi.org/10.1016/j.compedu.2020.103818

Widodo, H. P. (2019). Teaching reading in EFL contexts: Strategies and practices. *Journal of Language Teaching and Research, 10*(4), 745–752.

Yusuf, M., & Hasanah, U. (2021). The implementation of game-based learning in English classrooms. *Journal of English Pedagogy, 4*(2), 98–110.

Zainuddin, Z., & Halili, S. H. (2016). Flipped classroom research and trends from different fields of study. *The International Review of Research in Open and Distributed Learning, 17*(3), 313–340.