THE EFFECTIVENESS OF EWA (ENGLISH WITH APPS) TO IMPROVE READING SKILLS

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ABSTRACT

Reading skills were essential for students to understand various types of texts and master vocabulary. However, many students faced difficulties in comprehending English reading texts and showed low motivation for reading. To address this issue, this study aimed to test the effectiveness of the EWA (English with Apps) application as a digital learning medium for improving students' reading skills. The research employed a pre-experimental design with a one-group pretest-posttest model. The subjects of the study consisted of 35 students from class 10D at SMAN 1 Nanga Mahap. Data were collected through reading skills tests and analyzed using paired t-tests. The results showed that the average pre-test score of participants was 35.14, while the average post-test score increased to 44.86, with a difference of 9.71. Statistical analysis indicated that this difference was statistically significant with a p-value < 0.0001. These findings suggested that the use of the EWA application effectively improved participants' understanding, providing strong evidence of the positive impact of this intervention. The study concluded that a mobile-based EWA application is a promising approach to improving English reading skills in the context of secondary education. However, given the small pretest-posttest results, further research is needed in relation to this study.

Keywords: *EWA, Reading Skills, Pre-Experimental Research*

A. PENDAHULUAN

Reading is one of the fundamental and crucial skills in learning English at the Senior High School level. This ability involves not only understanding texts but also mastering vocabulary, which serves as the main foundation for accessing a variety of information available through both printed books and increasingly dominant digital media. With good reading skills, students understand various contexts, absorb information effectively, and adapt to the growing demands of learning in this modern era. Additionally, in this fast-paced digital age, reading skills become even more crucial. Students are required to filter relevant and accurate information from the abundant online sources (Puspitosari et al., 2024).

Based on initial observations at SMAN 1 Nanga Mahap, significant challenges appear. Many tenth-grade students still experience difficulties in understanding English reading materials. This is reflected in their low reading test scores, which indicate

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serious obstacles in vocabulary mastery and their low motivation to read. This condition results in students struggling to grasp the main ideas and details of the texts, ultimately affecting their ability to communicate and think critically. Given the importance of this skill, innovation in teaching methods is necessary to overcome these challenges, allowing students to experience a more accessible and enjoyable reading learning process.

As an alternative solution to address these issues, the EWA (English with Apps) application offers an innovative approach. This application is designed with various features that support effective English reading learning. These features include a built-in dictionary, allowing students to search for word meanings without switching applications; instant translation, which facilitates the understanding of complex phrases or sentences; and a gamification system, which makes the learning process more interactive and enjoyable. These features are collectively designed to reduce the cognitive barriers often faced by students, speed up vocabulary mastery, and ultimately make reading activities more engaging (Ahmadi, 2018). With this interactive approach, the EWA application aims to enhance student engagement and create a more enjoyable learning experience. The use of digital technology in language learning is supported by various previous studies. Bua (2022), for example, finds that language applications have great potential to improve reading skills, especially among students who previously face difficulties. A study by Maharani (2021) also reports an increase in learning motivation when students use interactive platforms, showing that technology can be an effective motivator for learning interest.

Additionally, Harahap (2024) highlights that mobile applications play a crucial role in enhancing vocabulary mastery, particularly due to the accessibility they offer to users. Furthermore, recent research by Rahayu & Nugroho (2023) emphasizes that the integration of digital applications can improve students' literacy and build their confidence in reading English texts, a skill that is very important in today's information era. In addition, research by Makoe & Shandu (2018) shows that the use of mobile learning applications can enhance student motivation and improve English learning outcomes.

Although there are several studies, few discuss the use of EWA to enhance reading skills in high schools in Indonesia. To fill this gap, this research aims to explore how effective EWA is in helping tenth-grade students improve their reading skills and vocabulary mastery through a pre-experimental study with a one-group pretest-posttest design. Additionally, this study will consider various factors, such as students' learning styles and technology accessibility, to provide a more comprehensive picture of how EWA

can be effectively implemented in educational settings. By addressing different learning styles, such as visual, auditory, and kinesthetic, it is hoped that the use of EWA can be tailored to meet the individual needs of students, making the learning process more effective.

Furthermore, this research will investigate how EWA can help address issues arising from the limitations of technology infrastructure in schools. By understanding these challenges, it is hoped that EWA can be the right solution to enhance the quality of English learning at the senior high school level.

B. METODOLOGI PENELITIAN

This research uses a pre-experimental design with one group pretest and posttest, following the methodology proposed by Campbell & Stanley (1963). The main goal of this study is to evaluate how effective the EWA (English with Apps) application is in improving students' reading skills and vocabulary mastery. In this design, the same group of participants is tested twice: first before the intervention takes place (pretest) and a second time after the intervention is completed (posttest).

This research is conducted at SMAN 1 Nanga Mahap, a public high school located in the Nanga Mahap District, Sekadau Regency, West Kalimantan. The school has an A accreditation, indicating a high quality of education, and follows the Merdeka Curriculum. With a total of 571 students learning under the guidance

of 26 teachers, SMAN 1 Nanga Mahap is committed to providing a conducive learning environment that supports students' academic development.

The population in this study consists of all tenth-grade students (a total of 198 students) enrolled at SMAN 1 Nanga Mahap during this academic year. The research sample is selected using purposive sampling techniques (Cohen, Manion, & Morrison, 2018). A total of 35 students from class 10D are chosen because they demonstrate lower scores in reading assessments and struggle to understand English texts.

C. HASIL DAN PEMBAHASAN

The data in this study was collected through two stages of testing: a pretest conducted before the intervention and a posttest administered after the use of the EWA application. The pretest served as an initial measurement to assess students' reading abilities and provided an overview of their skills levels before the intervention. In other words, the pretest provided essential baseline data to understand students' starting positions in reading skills.

After the intervention period using the EWA application, students underwent the posttest to evaluate the impact of the applied teaching method. This posttest aimed to measure the changes that occurred in students' reading abilities after they participated in the intervention program. By comparing the results of the pretest and posttest, the researcher was able to assess how

effective the EWA application was in improving students' reading skills overall.

Table 1. *Pretest-Posttest Results*

No	Pre Test	Post Test	Difference
Total	1230	1570	340
Mean	35,14	44,86	9,71
Standard Deviation	11,47	10,18	7,4
Minimum	15	25	
Maximum	60	70	
Range	45	45	

The research results showed a clear improvement in students' reading scores after the intervention. The average score increased significantly, from 35.14 in the pretest to 44.86 in the posttest, with a total increase of 9.71 points. This increase reflected an enhancement in students' reading skills after using the EWA application. Additionally, the minimum score also improved, rising from 15 in the pretest to 25 in the posttest, indicating that even the lowest-performing students made positive progress. On the other hand, the maximum score increased from 60 to 70, signifying that the highest-achieving students were able to attain greater achievements after the intervention.

Although the score range remained the same at 45 points, the standard deviation decreased from 11.47 to 10.18. This decrease indicated that student performance in the posttest became more consistent

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and distributed more evenly, suggesting that more students achieved scores closer to the average. Overall, the findings indicated that the EWA application had a significant positive impact on students' reading performance. This improvement was evident not only in the higher average scores but also in the increased uniformity of the results obtained by students. This suggests the potential of the EWA application as an effective tool for enhancing reading skills among students.

The results of this t-test supported the hypothesis that the use of the EWA application significantly improved students' reading skills. Thus, these findings demonstrated that the intervention was effective in helping students enhance their reading abilities.

Table 2. *Paired t-test results*

Statistic	Value
df	34
t-statistic	9.71
P value	<0.0001

The p-value obtained from this t-test was significantly below the threshold of 0.05, confirming that the difference between the pretest and posttest scores was statistically significant. Thus, the null hypothesis (H0), which stated that there would be no significant improvement in students' reading abilities, was rejected. Conversely, the alternative hypothesis (H1), which proposed that there was a significant improvement in students' reading

abilities after the intervention, was accepted.

This decision indicated that the EWA application had positively contributed to the enhancement of students' reading skills. With strong evidence from this statistical analysis, the researcher concluded that the use of the application was effective in improving reading abilities among tenth-grade students at SMAN 1 Nanga Mahap.

The calculation results showed a Cohen's d value of 1.31. This value fell into the "very strong" category. This category indicated that the intervention not only provided a significant increase in scores but also reflected a substantial and practical impact on students' reading abilities.

Table 3. The Criteria of Effect Size

Effect Size	Classification
< 0.1	Weak
< 0.3	Modest
< 0.8	Moderate
≥ 0.8	Very Strong

A value of 1.31 clearly indicated that the EWA application had a very strong effect on the improvement of students' reading abilities. This figure illustrates that the intervention not only resulted in a significant change but also demonstrated a substantial impact on the development of students' reading skills. Thus, this application proved effective in helping students enhance their skills and reading abilities in a significant and impactful way.

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This study explored the effectiveness of the EWA (English with Apps) application in improving students' reading skills. The research results showed that the average pre-test score of participants was 35.14, while the average post-test score increased to 44.86, with a difference of 9.71. Although this change appeared small, statistical analysis indicated that the difference was statistically significant with a p-value < 0.0001. This suggested that the intervention applied, namely the use of the EWA application, had a strong effect and was unlikely to have occurred by chance. Thus, the increase in post-test scores could be interpreted as an indication of improved understanding or skills of participants after undergoing the intervention that utilized the EWA application.

This improvement in reading skills could be theoretically explained through the principles of mobile-assisted language learning (MALL). Digital applications like EWA offered interactive features, instant feedback, and engaging content, all of which could enhance learning motivation and reduce anxiety while reading. Based on constructivist learning theory, the use of technology allowed students to actively construct meaning through exposure to authentic texts and adaptive practice. Additionally, the gamification elements in EWA aligned with motivation theory, as they increased students' desire to consistently engage in reading tasks. The findings of this study aligned

closely with existing research on the use of mobile-assisted language learning (MALL) and gamified applications in enhancing reading comprehension.

First, a systematic review by Sari and Santosa (2023) reported that MALL platforms such as Padlet, Google Classroom, and Quizizz had a significant positive impact on the reading comprehension of high school students. These platforms were found to facilitate online discussions, contextual practice, and quizzes—features similar to the interactive modules of EWA that supported student learning. Second, gamification of reading tasks proved to enhance students' motivation, engagement, and performance. Anggrainy, Abdul Karim, and Radjaban (2023) found that EFL students using Kahoot! in reading comprehension activities demonstrated significant achievement gains, indicating that points, quizzes, and immediate feedback were effective motivators. Similarly, a quasi-experimental study among Chinese students showed that gamified learning significantly improved their reading abilities and language enjoyment compared to a non-gamified environment (Cheng & Xiao, 2025).

Third, the broader impact of mobile applications on vocabulary acquisition supported the findings of this study, where vocabulary mastery is a key component in improving reading skills. Rezaei, Mai, and Pesaranghader (2014) noted measurable increases in students'

vocabulary retention, confidence, and classroom participation after integrating mobile learning tools. In the local context of Indonesia, Fathurrahman (2022) reported that high school students using MALL for reading comprehension experienced increased enthusiasm, relaxation, and understanding. Thanks to mobile tools that provided instant translation and contextual vocabulary support, these features reflected the dictionary and translation tools in the EWA application.

D. KESIMPULAN

Based on the findings and discussions generated from this study, several important conclusions were drawn. First, the use of the EWA application had a significant impact on improving students' reading abilities. The pretest and posttest results showed a clear improvement, with the average score increasing from 35.14 in the pretest to 44.85 in the posttest. The paired t-test also confirmed this increase, with a p-value of 0.0001, which was well below the significance threshold of 0.05. This indicated that the score increase did not occur by chance but was a result of the treatment provided. Thus, it was concluded that the EWA application was effective in enhancing students' reading skills.

Second, the results of this study supported an increasing number of studies emphasizing the positive role of mobile-assisted language learning (MALL) in improving

language abilities. These findings suggested that the integration of technology in classroom learning practices could enrich the learning process and provide students with meaningful opportunities to engage with reading materials in new and interactive ways. Third, although the results were promising, this study had several limitations. It only involved one experimental group with a relatively small sample size. This limited the generalizability of the findings and hindered comparisons with a control group. Therefore, while the results indicated effectiveness, they could not yet be broadly applied across various contexts and populations.

Overall, this study provided strong evidence that the EWA application made a significant contribution to the development of students' reading abilities. However, further research with larger and more diverse samples was needed to strengthen and validate these findings..

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