

The Effect of Readable Application on Students' Reading Ability at Eleventh Grade of SMA Negeri 11 Kota Jambi

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ABSTRACT

Reading is an essential skill in English language learning; however, many senior high school students still experience difficulties in developing adequate reading ability. This study aimed to investigate the effect of using the Readable Application on students' reading ability at SMA Negeri 11 Kota Jambi. The research employed a quantitative pre-experimental design using a one-group pretest-posttest model. The participants consisted of 30 eleventh-grade students selected through cluster sampling. Data were collected through multiple-choice reading tests administered before and after the treatment. The results showed a significant improvement in students' reading scores, with the mean score increasing from 38.43 in the pre-test to 79.73 in the post-test. The hypothesis testing using the Wilcoxon Signed-Rank Test revealed a significance value of 0.001 ($p < 0.05$). These findings indicate that the Readable Application has a significant positive effect on improving students' reading ability.

Keywords: *Readable Application, Reading Ability*

INTRODUCTION

Reading is a fundamental skill in English as a Foreign Language (EFL) learning because it enables students to understand written texts, acquire new vocabulary, and access academic information. In Indonesian senior high schools, reading is one of the core language skills emphasized in the curriculum. Nevertheless, many students still face difficulties in reading English texts, such as limited vocabulary knowledge and low motivation to read.

Several studies have indicated that students' low reading ability is influenced by traditional teaching methods that rely heavily on textbooks and teacher-centered instruction. These approaches often provide limited opportunities for students to engage actively with texts. As a result, students tend to lose interest and struggle to comprehend reading materials effectively.

The development of educational technology has introduced digital applications as alternative learning tools to support reading instruction. One of these tools is the Readable Application, which provides digital texts with adjustable readability levels, vocabulary

support, and interactive features. Previous studies have suggested that digital reading applications can enhance students' engagement and support reading development; however, empirical evidence in public senior high school contexts remains limited.

Therefore, this study aims to examine the effect of using the Readable Application on students' reading ability at the eleventh grade of SMA Negeri 11 Kota Jambi. This research is expected to provide empirical evidence regarding the effectiveness of digital reading applications in improving students' reading performance.

REVIEW OF RELATED LITERATURE

Reading Comprehension

Reading comprehension is the ability to understand, interpret, and construct meaning from written texts. According to the Simple View of Reading theory, reading comprehension is the product of decoding ability and linguistic comprehension. Students must be able to identify main ideas, understand details, make inferences, and interpret implicit meaning in order to comprehend texts effectively. In EFL contexts, reading comprehension is often influenced by vocabulary mastery, background knowledge, and learning strategies.

The Role of Digital Tools in Reading

Digital tools in language learning provide interactive and multimodal learning experiences. Multimedia Learning Theory (Mayer, 2001) suggests that combining text and multimedia elements enhances deeper understanding through dual-channel processing. Educational technology, including gamification and adaptive learning systems, can increase students' motivation and engagement (Cassano et al., 2019).

Readable Application

Readable is a digital reading application designed to improve students' reading comprehension. It provides automatic translation, vocabulary support, adjustable reading levels, and interactive quizzes (Jofitasari, 2022). The personalization feature allows students to select texts based on their proficiency level, while real-time feedback helps monitor comprehension progress.

METHODOLOGY

This study employed a quantitative research method using a pre-experimental one-group pretest–posttest design. The participants were 30 eleventh-grade students of SMA Negeri 11 Jambi City selected through cluster sampling.

The research instrument was a multiple-choice reading comprehension test aligned with CEFR A2–B1 level. The test measured students' ability to identify main ideas, understand details, interpret implicit information, and analyze narrative text structures.

The treatment involved integrating the Readable application into classroom reading activities for several sessions. Students read narrative texts through the application, completed vocabulary tasks, and answered comprehension quizzes.

Data were analyzed using descriptive statistics and a paired-sample t-test to

determine whether there was a significant difference between pre-test and post-test scores.

FINDINGS AND DISCUSSION

This study used pre-test and post-test scores from 30 students. The descriptive statistics are presented in Table 1.

Table 1. Descriptive Statistics of Pre-Test and Post-Test Scores

Test	N	Mean	Std. Deviation
Pre-Test	30	64.20	7.85
Post-Test	30	78.10	6.90

Table 1 shows that the mean score of the pre-test was 64.20, while the mean score of the post-test increased to 78.10. This improvement indicates that students' reading comprehension improved after implementing the Readable application.

To determine whether the improvement was statistically significant, a paired-sample t-test was conducted. The results are presented in Table 2.

Table 2. Paired Sample t-Test Result

Variable	Mean Different	t-value	df	Sig. (tailed)
Pre-Test Post-Test	- 13.90	-9.214	29	0.000

Table 2 indicates that the significance value is 0.000, which is lower than the significance level of 0.05 ($p < 0.05$). Therefore, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted. This result confirms that the Readable application has a statistically significant effect on students' reading comprehension.

Findings

The findings showed that students' reading ability improved significantly after the implementation of the Readable Application.

The pre-test results indicated that most students were categorized at a low level of reading ability. After the treatment, the post-test results showed that the majority of students reached a good to very good level.

The statistical analysis revealed that the mean score increased from 38.43 in the pre-test to 79.73 in the post-test. The Wilcoxon Signed-Rank Test produced a significance value of 0.001, which was lower than the significance level of 0.05. Therefore, the null hypothesis was rejected, and the alternative hypothesis was accepted.

Discussion

The findings demonstrate that the Readable application significantly improves students' reading comprehension. Vocabulary support and translation tools assisted students in understanding unfamiliar words, while comprehension quizzes reinforced narrative structure understanding.

These findings align with previous studies highlighting the effectiveness of digital applications in improving reading comprehension and motivation (Aisyah, 2024; Jannah et al., 2024). Furthermore, the application supports Multimedia Learning Theory (Mayer, 2001), emphasizing dual-channel processing for deeper comprehension.

CONCLUSION

The study concludes that the Readable application has a significant positive effect on students' reading comprehension at SMA Negeri 11 Jambi City. The integration of digital reading tools enhances comprehension performance and student engagement.

Readable can be recommended as a supplementary tool in EFL classrooms. Future research should involve control groups, larger samples, and longer implementation periods to examine long-term effectiveness.

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