



THE USE OF WEB BASED LEARNING IN IMPROVING STUDENTS' READING SKILL

Maha Murni^{1*}, Ferlya Elyza²

^{1,2}Prodi Pendidikan Bahasa Inggris, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Abulyatama, 23372, Indonesia.

*Email korespondensi : murniqueencoffee@gmail.com¹

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Abstract: *This study investigates the effectiveness of Web-Based Learning (WBL) in improving students' reading skills, particularly reading comprehension at MAS Daruzzahidin. The research employed a quantitative method using a pre-experimental design with a one-group pre-test and post-test model. The participants were 20 tenth-grade students selected through total sampling. Data were collected through reading comprehension tests consisting of 10 essay and 5 true/false questions, administered before and after the treatment. The treatment was conducted over four meetings using Google Classroom as the learning platform. The result of the paired sample t-test showed a significant improvement in students' reading skills after the implementation of WBL. The mean score increased from 62.55 in the pre-test to 73.25 in the post-test, with a significance value of 0.000 ($p < 0.05$), indicating that the null hypothesis was rejected and the alternative hypothesis was accepted. These findings suggest that WBL has a significant positive effect enhancing students' reading comprehension.*

Keywords : *Web-Based Learning, Reading Skills, reading Comprehension, Pre-Experimental Study.*

Abstrak: Penelitian ini bertujuan untuk mengetahui efektivitas Web-Based Learning (WBL) dalam meningkatkan keterampilan membaca siswa khususnya pemahaman membaca di MAS Daruzzahidin. Penelitian ini menggunakan metode kuantitatif dengan desain pra-eksperimen (satu grup pre-test dan post-test). Subjek penelitian adalah 20 siswa kelas X yang diambil dengan Teknik total sampling. Instrumen penelitian berupa tes membaca yang terdiri dari 10 soal esai dan 5 soal benar/salah, diberikan sebelum dan sesudah perlakuan. Hasil uji t sampel berpasangan menunjukkan adanya peningkatan signifikan pada keterampilan membaca siswa setelah penerapan WBL. Nilai rata-rata meningkat dari 62,55 pada pre-test menjadi 73,25 pada post-test, dengan nilai signifikansi 0,000 ($p < 0,05$). Hal ini menunjukkan bahwa hipotesis nol ditolak dan hipotesis alternatif diterima. Temuan ini mengidentifikasi bahwa penggunaan WBL memberikan pengaruh positif yang signifikan terhadap peningkatan pemahaman membaca siswa.

Kata kunci : *Web-Based Learning, Keterampilan Membaca, Pemahaman Membaca, Pre-Eksperimen*

INTRODUCTION

Reading is one of the basic skills in English that helps students in the learning process, improves their literacy, and allows them to enjoy learning. However, a lack of enthusiasm, a small vocabulary, and poor teaching methods continue to cause reading comprehension problems for many Indonesian students. Textbooks and teacher-centered education are the mainstays of traditional classroom teaching approaches, which frequently fall short of meeting students' varied learning of digital needs or lead to low levels of engagement. However the swift development of digital technology has created new chances to improve learning interaction, students-centered approaches, and classroom flexibility. Web-Based Learning (WBL) is one such approach that provides students with online resources, interactive exercises, and digital platforms to practice their skills.

Research on the use WBL to improve reading comprehension among Indonesian high school students is still lacking. Despite the fact that many studies have shown that digital or online-based instruction can improve reading engagement and performance, especially in specific context like MAS Daruzzahidin it is yet uncertain how much WBL can enhance students' reading comprehension when compared to traditional classroom instruction. The benefits of combining spoken and visual information, and Vygotsky's constructivist theory.

In recent years, WBL which combines interactive exercises, online discussions, and multimedia resources has emerged as a promising teaching strategy. Technology enhanced reading instruction has been shown to improve student motivation, engagement, and comprehension in previous studies (Fitri et al., 2022; Rahmatang et al., 2025; Nainggolan, 2024). WBL is consistent with Mayer's (2009) Multimedia Learning Theory, which emphasizes which promotes students to create meaning via active participation and teamwork.

This study is unusual because it uses Google Classroom as an educational platform for WBL to improve reading comprehension among tenth-grade students at MAS Daruzzahidin. Unlike previous studies conducted at basic levels or in broader contexts, this study adapts WBL to a senior high school setting by combining interactive narrative reading activities and digital feedback to improve comprehension outcomes.

This study contributes both theoretically and practically. In addition to helping students become more independent and motivated readers, it provides English teachers with an alternative paradigm for integrating digital resources into the learning process and provides empirical evidence of WBL's effectiveness in improving students' reading comprehension. The findings are also expected to assist curriculum designers in promoting technology-based literacy strategies to enhance English language instruction in the digital era.

LITERATURE REVIEW

Reading Comprehension in EFL Context

Reading comprehension is a fundamental skill in English as a Foreign Language (EFL) learning, as it enables students to construct meaning from written texts and supports overall language development. According to Hutchinson and Waters (1987), reading is not only a linguistic process but also a cognitive activity that involves

interpreting meaning based on prior knowledge and context. In EFL classrooms, students often face challenges such as limited vocabulary, lack of background knowledge, and low motivation, which hinder their comprehension ability.

Furthermore, reading comprehension involves several sub-skills, including identifying main ideas, understanding vocabulary in context, making inferences, and recognizing text structure. These skills require effective instructional strategies that actively engage learners in the reading process. Therefore, innovative teaching methods are needed to enhance students' reading comprehension, especially in the digital era.

Web-Based Learning (WBL)

Web-Based Learning (WBL) refers to the use of internet-based technologies and platforms to facilitate learning activities. It provides learners with access to various digital resources, interactive tasks, and flexible learning environments. WBL allows students to learn independently while also promoting collaboration through online discussions and activities.

According to recent studies, WBL has become an effective approach in language learning because it integrates multimedia elements such as text, audio, video, and interactive exercises. These features help learners better understand the material and maintain their engagement during the learning process. In addition, WBL supports student-centered learning, where learners take an active role in constructing their knowledge.

METODE

This study adopted a quantitative approach using a pre-experimental one-group pre-test and post-test design. According to Sugiyono (2014), this design is suitable when the researcher aims to measure the impact of a treatment without comparing it to a control group. It focuses on determining whether a significant change occurs after the intervention.

The pre-test was given to all students MAS Daruzzahidin tenth graders. Its goal was to assess the students' reading comprehension skills before WBL was introduced. 10 essay questions and 5 true/false questions based on the narrative text *Malin Kundang* made up the test. While the true/false questions measured literal grasp of the story, the essay questions evaluated comprehension skills like recognizing text structure, comprehending language in context, and identifying the primary concept. The baseline performance of each student was determined by recording their score.

During the two treatment sessions, Google Classroom served as the main WBL platform. During the session, the lecturer posted digital reading materials, comprehension exams, and discussion starters. Students read the book online, participated in group discussions, and answered comprehension questions using the website. And the teacher acted as both a facilitator and an observer to guarantee active students participation and monitor development. This digital environment allowed students to interact with their peers, access materials whenever they wanted, and receive timely feedback on their reading assignments.

Following the therapy, students were given a post-test in the same style, but with different but comparable

text content. The goal was to gauge how much the students' reading comprehension had improved after receiving instruction vi WBL. The success of the treatment was then ascertained by comparing the results of the pre-test and post-test. With the help of the English teacher, the researcher directly collected all of the data. In order to provide uniform classroom circumstances for all participants, the entire process was spread out over four meetings, or roughly two weeks.

The population of this research consisted of all first-grade students of MAS Daruzzahidin in the Academic Year 2024/2025. Class X at the school comprised only one group, X-A with a total around 20 students. And the sampling technique used was total sampling.

FINDINGS AND DISCUSSION

The purpose of this study is to determine the effect of WBL on students' reading skills. To achieve this objective, the researcher employed a pre-experimental design using a one-group pre-test and post-test design, in which the experimental group took pre-test before the treatment and post-test after the treatment.

Bellow are the results paired-sample t-test, which measure the difference in scores between the pre-test and post-test in order to evaluate the effect of WBL on improve students' reading skills.

Table 1. Paired sample statistic

Mean		N	Std. Deviation	Std. Error Mean
1	Pair Score Pre Test	20	18.069	4.040
	Score Post 73.25 Test	20	17.835	3.988

Based on the table above, it can be seen that the maximum pre-test score obtained by the tenth-grade students of MAS Daruzzahidin was 45, while the minimum score was 36. The mean score obtained was 62.55, with a standard deviation of 18,06. Meanwhile, the maximum post-test score was 100, and the minimum post-test score was 93. The mean score was 73.25, with a standard deviation of 17,83.

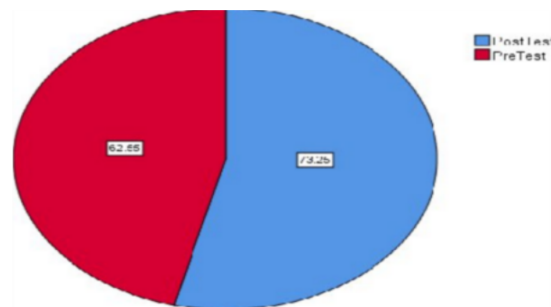


Chart 1. the average Score of Pre-test and Post-test

Based on the data Chart 4.3, it can be seen that before implementing the WBL from 20 students, the pre-test 62,55. It means that there were still some students have not reached the criteria for reading skills in learning English. Furthermore, after implementing WBL, the average post-test score has increased to 73,25. From the differences in students' reading skills achievement after using WBL. Paired t-test analysis showed that this difference was statistically significant, and students experienced considerable improvement after using WBL.

Hypothesis testing has the function of finding temporary assumptions set by the teacher. The statistic used are parametric statistic using the Paired Sample T-test. The hypothesis previously put forward by the author is as follows. Ha (Alternative Hypothesis): Web-based Learning has significant effect on improving students' reading abilities. H0 (Null Hypothesis): web-Based Learning does not have a significant effect on students' reading abilities.

CONCLUSION AND SUGGESTION

Conclusion

Based on the findings of this study, it can be concluded that the implementation of Web-Based Learning (WBL) has a significant positive effect on students' reading skills, particularly in reading comprehension. The results of the paired-sample t-test revealed a statistically significant difference between the pre-test and post-test scores, with a significance value of $p < 0.05$. This indicates that the alternative hypothesis was accepted, while the null hypothesis was rejected.

Furthermore, the mean score of students increased from 62.55 in the pre-test to 73.25 in the post-test, demonstrating a clear improvement in students' reading comprehension after the application of WBL. This improvement can be attributed to several factors, including the interactive nature of WBL, the use of engaging multimedia materials, flexible access to learning resources, and immediate feedback provided during the learning process.

In addition, the findings of this study support the principles of Multimedia Learning Theory and Constructivist Theory, which emphasize the importance of combining visual and verbal information, as well as active student participation in the learning process. Therefore, WBL can be considered an effective and relevant instructional approach for enhancing students' reading comprehension in the digital era..

Suggestion

Based on the results of this study, several suggestions are proposed:

The Use of Web Based Learning....

(Murni & Elyza, 2026)

Teachers are encouraged to integrate Web-Based Learning into their teaching practices as an alternative medium to improve students' reading skills. They should design appropriate and engaging learning materials that match students' proficiency levels and incorporate various interactive activities to enhance motivation and comprehension.

Students are expected to actively utilize web-based learning platforms to practice reading independently beyond classroom hours. They should also apply effective reading strategies, such as skimming, scanning, and contextual guessing, to improve their understanding of texts.

Future researchers are recommended to expand the scope of the study by involving a larger sample size and a longer duration of treatment. Additionally, further studies may explore the effectiveness of WBL in combination with other instructional methods or investigate its impact on other language skills to obtain more comprehensive results.

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