The use of the Duolingo App to Improve Vocabulary Learning among Seventh-Grade Junior High School Students

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INTRODUCTION

Applications that support student learning in improving vocabulary

The teachers now required to use technology in teaching to be more adaptive to technological developments with have to improve vocabulary mastery.

This study aims to investigate the effectiveness of using Duolingo, a language learning app, in addressing these challenges. By evaluating its impact on improving vocabulary mastery and identifying its potential as learning tool

UMSIDA
DARI SINI PENCERAHAN BERSEMI

Literature Review

- Previous Research

Research Conducted by Anggraini (2024). The result show that using Duolingo not only affect the vocabulary, also increase Engagement and motivation in teaching and learning.

conducted by Nasrul (2023). The results show that the Duolingo app is effective in helping students improve their vocabulary mastery. However, these studies have not explored the effectiveness of Duolingo at lower education levels, such as junior high school students, especially grade seventh.

- Current research

This study focus on investigating the effectiveness of using the Duolingo app in improving English vocabulary mastery among seventh grade junior high school students.

Differences in subject used in this research and previous research.

- Research question

What extent does the Duolingo application improve seventh-grade students' vocabulary mastery at SMP Muhammadiyah 8 Tanggulangin?

RESEARCH METHOD

Design	Pre-Experimental One group Pre-test and Post-test
Sample	23 students seventh-Grade
Instruments	Multiple choice question (Validated)
Analysis	Paired sample t-Test

RESEARCH METHOD

DATA COLLECTION

Session	Explanation
Pre-Test	Students took an initial vocabulary test to determine their baseline vocabulary proficiency
Treatment	For one week, students used the Duolingo application during English class sessions to learn vocabulary through gamified, interactive exercises.
Post-test	After the treatment, the same vocabulary test was administered to measure students' progress .

RESULT

Descriptive Statistic

Test Type	Mean	N	Std. Deviation	Std. Error mean
Pre-Test	55.87	23	8.07	1.68
Post-Test	82.61	23	6.01	1.25

RESULT

Paired Sample t-Test

Test Pair	Mean Difference	Std. Deviation	Std. Error	T-Value	df	Sig (2-tailed)
Pre-Post	-26.74	5.56	1.16	-23.06	22	0.000

Discussion

- There was an increase in the average score of 26.74 points.

- Duolingo is statistically effective (p-value 0.000).

- Gamification features and repetitive exercises improve motivation and learning outcomes

Conclusion

- The research revealed a statistically significant improvement in students' vocabulary performance after the intervention, highlighting the potential of gamified mobile applications in supporting language development in school-based settings

- Future research is recommended to address these limitations by using a quasi-experimental or true experimental design with a control group, larger and more diverse sample populations

Attachment

Picture 1: Data collection

Thankyou