

Using “Words of Wonders” Application to Upgrade English Vocabulary of Junior High Schools Students

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ABSTRACT

English vocabulary mastery remains a challenge for many junior high school students, including those at SMP Negeri 2 Alla Enrekang. Many students struggle to understand and use English vocabulary effectively. Technology-based educational game applications is introduced as a potential tool for this purpose. This study aims to determine the effectiveness of the Words of Wonders application in enhancing the English vocabulary mastery of second-grade students at SMPN 2 Alla Enrekang. This study used a pre-experimental method with a pre-test and post-test design. The research sample consisted of 24 second-year students at SMPN 2 Alla Enrekang in the 2024/2025 academic year. The instrument used was an English vocabulary test administered before and after the treatment. The data obtained were analyzed quantitatively using a t-test through the SPSS application to determine the significance of the students' learning improvement. The results showed a significant increase in students' English vocabulary skills after using the Words of Wonders application. The pre-test average score of 52.50 increased to 87.71 in the post-test. The t-test results also showed a statistically significant difference between the pre-test and post-test scores. Thus, the Words of Wonders application proved effective in improving the mastery of English vocabulary of second-grade students of SMPN 2 Alla Enrekang.

Keywords: *English Vocabulary, Words of Wonders Application, Vocabulary Improvement.*

1) INTRODUCTION

Technology is essential in people's lives worldwide in this increasingly modern age. Information and communication technology has reached various aspects of social life, especially the Internet, which can be easily accessed. Technology is used not only in communication but also in education. In this era of globalization, the world of education has also undergone a significant transformation (Anderson J et al., 2021). Conventional learning methods dominated by teacher lectures, textbooks, and writing exercises are increasingly integrated with modern technology. This shift changes learning tools, resources, and the interaction dynamics between teachers, students, and learning content. Seeing this, it is clear that innovation in education technology has a crucial role in improving the quality of education in Indonesia in the future. Loo argues that technology integration in education needs to be

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continuously updated by redesigning existing programs to create innovative learning experiences for teachers and students (Loo et al., 2023).

Integrating technology in learning allows teachers to customize learning methods to make the student learning process more efficient and aligned with curriculum objectives (Santri, 2020). Especially in language learning, technology provides opportunities for teachers to create more effective learning experiences for students. In learning English as a foreign language, students must master four skills: listening, speaking, reading, and writing. To master these four skills, an essential mastery of the English language is required. One of the most fundamental aspects of learning English is mastering good and correct vocabulary. According to Tran, vocabulary is a core component of language proficiency that significantly influences learning ability in speaking, listening, reading, and writing. Tran also emphasizes that vocabulary plays a significant role in every stage or level of learners' language development (Tran, 2020).

According to Alqahtani, vocabulary knowledge is often seen as essential for second language learners, as limited vocabulary can hinder effective communication (Alqahtani, 2015). By mastering adequate vocabulary, learners can convey messages to others without any misunderstanding. In addition, students' proficiency in English is also measured by how many words they have mastered. Therefore, direct vocabulary learning should be done in the language learning process (Webb, 2017). This method can increase students' awareness and understanding of the meaning of new words and facilitate vocabulary integration in real communication situations. Vocabulary learning is a fundamental aspect of mastering English, especially in the context of foreign language learning. The Indonesian Education Curriculum emphasizes the importance of vocabulary mastery as one of the main components in achieving English learning. According to Permendikbud Number 37 of 2018, students are expected to be able to use English to communicate in everyday contexts, which, of course, requires adequate vocabulary mastery. Good vocabulary mastery allows students to understand texts, communicate effectively, and express their ideas better. Therefore, vocabulary development should be the primary focus of English learning in schools.

Although the importance of vocabulary has been recognized, vocabulary learning in EFL contexts still faces several challenges. One of the main problems is the lack of exposure to the target language in students' daily lives, which limits their opportunities to practice and remember new vocabulary (Bown & Pullen, 2020). In addition, monotonous and less interactive teaching methods often fail to

motivate students to learn new vocabulary actively. Another problem usually faced is students' difficulty remembering and using new vocabulary in the proper context, which indicates that their in-depth understanding of the meaning and usage of words is still lacking (Webb, 2017). Limited time in class is also often an obstacle for teachers in providing sufficient vocabulary.

Students must have four primary skills in learning English: listening, speaking, reading, and writing. However, vocabulary mastery is the foundation that supports the development of these four skills. According to Schmitt, students must master at least 2000-3000 of the most common words to communicate effectively in English (Schmitt, 2019). In addition, students also need to understand the use of words in various contexts, collocations, and meanings. The ability to use vocabulary learning strategies independently is also essential so that students can continue to develop their vocabulary mastery outside the classroom.

Based on the researchers' initial observations and interviews with several students at SMPN 2 Alla, it is known that most of them struggle to master English vocabulary. This is reflected in the low scores obtained by the students in the vocabulary test and their inability to use the words they have learnt in conversation or simple writing. This condition shows that a monotonous learning approach cannot meet the diverse needs of students.

Therefore, innovation is needed in teaching methods to increase the effectiveness of vocabulary learning as well students' engagement.

Quoted by Dewi Nur Asyiah (2017), Kabiell revealed that most teachers and students do not understand effective methods and strategies in vocabulary learning. The English curriculum does not include vocabulary learning tools, and teachers are not aware of the importance of vocabulary. As a result, students often experience difficulties due to limited vocabulary, a significant obstacle in learning a language. On the other side, both teachers and students positively perceive the use of technology in language learning. Sumakul et al (2022), for example, reported that understanding vocabulary writing is easier with the aid of tools in teachers' teaching.

One of the promising modern language teaching methods is game-based language learning applications. Game-based learning applications are effective in improving student motivation and learning outcomes (Ahmed, A.A.A., et al., 2022; Gamio, N., 2019; Dehghanzadeh et al., 2021). The "Words of Wonders" application is one example of an educational game that combines vocabulary learning with engaging game elements. This application offers an innovative and interactive approach

to learning new vocabulary, allowing students to learn in a meaningful and enjoyable context. Furthermore, Words of Wonders allows students to repeatedly practice new vocabulary in various contexts, which is essential for long-term retention. According to Nation (2018), repetition and contextualization are crucial to building a deep understanding of new words. Using the app also allows students to study independently outside of class, addressing the time constraints of the classroom. With the progress tracking feature, students can monitor their progress, fostering a sense of accountability for their learning (Rahim et al., 2022). Overall, this approach improves vocabulary mastery and builds positive study habits among students.

Based on the previous explanation, this study aims to examine the effectiveness of the “Words of Wonders” application to improve the vocabulary of the second-grade students at SMPN 2 Alla in Enrekang Regency of South Sulawesi.

2) METHODS

a. Research Approach

The research used quantitative approach by implementing experimental research. The aim is to examine the effectiveness of the “Words of Wonders” program as a learning tool in enhancing students’ vocabulary. the researchers employed a quasi-experimental design consisting of a pre-test, treatment, and post-test.

b. Participants

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c. Instruments

The researcher used vocabulary test both in the pre-test and post-test to find out students’ initial vocabulary mastery and their vocabulary understanding after the intervention of “words of wonder” application over the five-meeting vocabulary learning. The test consisted of 30 multiple items that assessed students’ vocabulary mastery.

In the treatment stage, the researchers used the “words of wonder” application. This is a word game designed to improve English language skills, especially vocabulary. The app combines elements

of vocabulary learning with entertainment, presenting a challenge for users to find words hidden in a grid of letters that relate to a particular theme or category (Sudaryanto & Widodo, 2020).

Words of Wonders, developed by Fogo Games, is a challenging and educational app. Users are presented with a group of letters as a unique starting point and then tasked with using their creativity and linguistic abilities. The goal is to create new words from scratch using the available letters. As such, the app offers a balanced combination of entertainment and cognitive skill development (Putra et al., 2022).

d. Data Collection

Data of the students' initial vocabulary mastery was taken from the result of the pre-test. The test measured students' vocabulary mastery. After being treated with the "words of wonder" application, student competence of vocabulary was again assessed using the same test. The differences of students score between the pre-test and the post-test show how effective the application worked to improve students' vocabulary mastery. The researcher used the following rubric to measure students' vocabulary competency.

Table 1: *Assessment rubric*

Aspect Assessment	Criteria	Rating Scale
Vocabulary Mastery	1. Use vocabulary appropriately	4
	2. Uses vocabulary with some minor errors	3
	3. Shows basic understanding, but is often incorrect	2
	4. Unable to use vocabulary correctly	1

e. Data Analysis

In the stage of data analysis, researchers used statistical methods to process the data that has been obtained. The data collected through the test was analyzed by using the following steps:

1. Assessing the Test Items

Data analysis explains descriptive data by following the steps below:

$$S = \frac{R}{N} \times 100$$

Where:

S = Score of the test

R = The Number of Students'

Correct Answers N = Total number of questions

2. Using Descriptive Analysis

The students' scores were then classified using the following classification rubric:

Table 2: *Classification of Students' Scores*

No.	Range of Score	Classification
1	96-100	Excellent
2	86-95	Very Good
3	76-85	Good
4	66-75	Fairly Good
5	56-65	Fair
6	46-55	Poor
7	0-45	Very Poor

3. Calculating the standard deviation of students' pre-test and post-test, by using the formula below:

$$SD = \sqrt{\frac{\sum x^2 - \left(\frac{\sum x}{N}\right)^2}{N-1}}$$

Where:

SD = Standard Deviation

Σx = The total score of

students N = The number of students

4. Using T-test

A t-test can be done in the following way:

a. Count automatically with Windows SPSS 24

- 1) Open Windows SPSS 24
- 2) Enter the Pre and post-test data in the column
- 3) Click analyze > Compare Means > Paired Sample Test
- 4) Select the Variable option
- 5) Select Grouping Variable
- 6) Click OK, and the result appears in "Output.

5. Testing the hypothesis

Table 3: *Testing the hypothesis*

Comparison	Hypothesis	
	H ₀	H ₁
t-test < t-table	Accepted	Rejected
t-test > t-table	Rejected	Accepted

The t-test is a significant statistical method for analyzing the difference between two data groups with different sample characteristics and average values. In the interpretation of the T-test results, if the T-count value is greater than the T-table value, then the conclusion that can be drawn is that the null hypothesis (H₀) is accepted.

3) RESULTS AND DISCUSSION

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The findings of this study answer the question about the effectiveness of the ‘words of wonder’ application to improve students’ vocabulary mastery. To find out the effectiveness of the application, the researchers examined the students’ pre-test score and the post-test score as well. As mentioned before, the post-test was administered to students after being treated with the ‘words of wonder application’ over five meetings of learning.

a. Pre-Test Result

The data in Table 4 shows the students' pre-test scores and their classifications.

Table 4: *The Students' Scores in the Pre-Test*

No	Students'	Score of Pre-Test	Classification
1	A	40	Very poor
2	FAA	50	Poor
3	FFD	30	Very poor
4	MA	55	Poor
5	MARF	50	Poor
6	MF	45	Very poor
7	MFA	60	Fair
8	MMR	50	Poor
9	PIA	55	Poor
10	RS	65	Fair
11	AS	40	Very poor
12	AA	50	Poor
13	FAZ	60	Fair
14	I	55	Poor
15	NUT	65	Fair
16	NNT	50	Poor
17	NAR	40	Very poor
18	N	50	Poor
19	NK	55	Poor
20	NRDL	50	Poor
21	SWSM	60	Fair
22	S	60	Fair
23	ZAA	60	Fair
24	ZWA	65	Fair

(Data source: The students' scores in the pre-test)

Based on the data analysis above, it can be seen that students’ vocabulary skills are still relatively low, as they can answer about 9-20 questions correctly out of 30 questions. The distribution of scores

showed that five students were in the “Very Poor” category with scores between 30-45, while 11 students were in the “Poor” category with scores of 50-55, and 8 students were in the “Fair: category with scores of 60-65. The highest score achieved was 65 while the lowest score was 30.

b. Post-Test Result

The researcher also conducted a post-test to measure students' vocabulary mastery after they participated in learning with the Words of Wonders game method. The data listed in table 5 shows the students' post-test scores, which researchers obtained after analyzing the post-test results.

Table 5: *Students' Scores in the Post-Test*

No	Students'	Score of Post-Test	Classification
1	A	80	Good
2	FAA	95	Very good
3	FFD	85	Good
4	MA	70	Fairly good
5	MARF	85	Good
6	MF	80	Good
7	MFA	60	Fair
8	MMR	90	Very good
9	PIA	90	Very good
10	RS	75	Fairly good
11	AS	95	Very good
12	AA	90	Very good
13	FAZ	95	Very good
14	I	95	Very good
15	NUT	100	Excellent
16	NNT	100	Excellent
17	NAR	95	Very good
18	N	90	Very good
19	NK	95	Very good
20	NRDL	75	Fairly good
21	SWSM	95	Very good
22	S	100	Excellent
23	ZAA	70	Good
24	ZWA	100	Excellent

(Data source: The students' scores in the pre-test)

After applying Words of Wonders, the post-test results of students in class VIIIB SMP Negeri 2 Alla showed a significant improvement in English vocabulary skills. From the analysis of the table

above, it can be seen that most students achieved a very satisfactory category with a much higher score than the pre-test. Four students completed the “Excellent” category with a perfect score (100). A total of 11 students achieved the “Very Good” category with scores of 70-75, three students were in the “Fairly Good” category, and only one student was in the “Fair” category with a score of 60. There were no students in the “Poor” or “Very Poor” categories, reflecting the learning intervention's success.

These results show a significant improvement over the pre-test average of 52.5, with a difference of 35.2 points. These post-test results show that the Words of Wonders application is effective in improving students' English vocabulary acquisition.

After calculating the students' scores both in the pre-test and post-test, the researcher then determined the classification of these scores. Data regarding the classification of students' post-test scores can be seen in table 7 below.

Table 7: *The classification of students' pre-test and post-test scores*

No	Categories	Pre-Test		Post-Test	
		Frequency	Percentage	Frequency	Percentage
1	Excellent	0	0%	4	17%
2	Very Good	0	0%	11	46%
3	Good	0	0%	5	21%
4	Fairly Good	0	0%	3	13%
5	Fair	8	33%	1	4%
6	Poor	11	46%	0	0%
7	Very Poor	5	21%	0	0%
Total		24	100%	24	100%

(Data source: Frequency and percentage of pre-test and post-test)

Table 7 shows the categories, frequencies, and percentages of students' scores on the vocabulary test before and after the treatment. In the pre-test, most students were in the low performance category. There were 8 students (33%) who were in the medium category. In addition, 11 students (46%) were in the poor category, and 5 students (21%) were classified as very poor. At the pre-test stage, there were no students who reached the excellent, very good, good, or fair categories.

After the implementation of the Words of Wonders app, there was a significant change in student performance. The post-test results showed improvement in all categories. A total of 4 students (17%)

reached the excellent category, 11 students (46%) were in the excellent category, 5 students (21%) were in the good category, and 3 students (13%) reached the fair category. Only 1 student (4%) was still in the moderate category.

The table above shows the percentage of students in different performance categories before and after the test. The pre-test showed that students were in the fair, poor, or very poor categories. The post-test showed that there were no students in those categories, and the frequency value for the improvement in student performance was excellent.

c. 'Total Score Students' Vocabulary Test Using SPSS.

1. The Result of Homogeneity Test

The homogeneity test was conducted to determine whether the data from the pre- test and post-test groups had the same variance. Testing is done using Levene's Test for Equality of Variances through the SPSS Application.

Table 8: *The result of the Homogeneity test (Levene's Test)*

Paired Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means
		F	Sig.	t
Nilai Pre-test dan post-test	Equal variances assumed	1.517	.224	-12.067
	Equal variances not assumed			-12.067

(Data Source: the result of the Homogeneity test (Levene's Test)

Table 8 shows the categories, frequencies, and percentages of students' scores on the vocabulary test before and after the treatment. In the pre-test, most students were in the low performance category. There were 8 students (33%) who were in the medium category. In addition, 11 students (46%) were in the poor category, and 5 students (21%) were classified as very poor. At the pre-test stage, there were no students who reached the excellent, very good, good, or fair categories.

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2. The Result of T-Test (Paired Sample T-Test)

Table 9: *Descriptive Statistics of Pre-test and Post-test*

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE-TEST	52.50	24	8.969	1.831
	POST-TEST	87.71	24	11.130	2.272

(Data source: Pre-test and Post-Test Learning Outcomes Using SPSS)

The data analysis results show an increase in the average score of students from pre-test to post-test. In the table above, it can be seen that the maximum value of the pre-test for class VIIIB students at SMP Negeri 1 Alla is 65, and the minimum value is 40. The average value obtained by students in the pre-test is 52.50, with a deviation of 8.969. Meanwhile, the maximum post-test value for students was 100, and the minimum was 60. The average value obtained by students in the post-test showed a significant increase to 87.71 with a standard deviation of 11.130.

Table 10: *The Correlation Between Pre-test and Post-test*

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	PRE-TEST & POST-TEST	24	.005	.980

(Data source: Pre-test and Post-Test Learning Outcomes Using SPSS)

The very low correlation value (0.005) and significance value (0.980) indicate that there is not a strong linear relationship between the pre-test and post-test scores, but this does not impact the difference test results.

d. The Analysis of Data Using SPSS

1. Testing the Hypothesis

The method used to determine the truth of a statement is hypothesis testing. Previous researchers have stated this assumption. This study used parametric statistics with the t-test for independent samples based on homogeneity and normality tests. The hypothesis proposed is as follows:

- Null hypothesis (H0): The “Words of Wonders” application does not improve the English vocabulary of second-grade students of SMP Negeri 2 Alla.
- Alternative Hypothesis (H1): The “Words of Wonders” app improves the English vocabulary of second-grade students of SMP Negeri 2 Alla.

According to Field (2017: 403), the decision in the paired sample t-test is taken based on the significance value (Sig.) as follows:

- If the Sig. (2-tailed) < 0.05, then H0 is rejected and H1 is accepted, indicating a significant difference between the two groups.
- Conversely, if the Sig. (2-tailed) > 0.05, then H0 is accepted and H1 is rejected, indicating no significant difference between the two groups.

Table 11: *Paired Sample Test*

Paired Samples Test

Paired Differences			95% Confidence Interval of the Difference Lower
Mean	Std. Deviation	Std. Error Mean	

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Pair 1	PRE-TEST - POST-TEST	35.208	14.255	2.910	41.228
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		Paired Differences			
		95% Confidence			
		Interval of the			
		Difference			
		Upper			
			t	df	Sig.
					(2-
					taile
					d)
Pair 1	PRE-TEST - POST-TEST	29.189	12.100	23	.000

(Data source: Output of SPSS)

Based on the “Paired Samples Test” results table above, the Sig value is obtained. (2-tailed) 0.000 > 0.05, then H₀ is rejected, and H₁ is accepted. This shows that the Words of Wonders application can potentially improve the English vocabulary of grade VIII students at SMP Negeri 2 Alla. Thus, the statement that there is no average difference between pre-test and post-test learning outcomes cannot be accepted.

Another method of testing the hypothesis in the paired sample t-test besides comparing the significance value (p-value) with 0.05 is to compare the calculated t value with the t table. The basis for decision-making using this method is:

1. If the t value > t table, then H₀ is rejected and H₁ is accepted.
2. Conversely, if the t value < t table, then H₀ is accepted and H₁ is rejected.

The paired samples test table presents a statistical comparison between the pre- test and post-test scores of 24 students. The mean difference between the two tests is 35.208, indicating a substantial increase in scores after the learning intervention. The standard deviation of the differences is 14.255, and the standard error of the mean is 2.910. The t-value is 12.100 with 23 degrees of freedom, and the significance level (Sig. 2-tailed) is .000. This p-value is far below the standard threshold of 0.05, which indicates that the improvement in scores is statistically significant.

Thus, it can be concluded that there is a significant difference in the average score between the pre-test and post-test results of learning outcomes, which indicates that the “Words of Wonders” application is efficacious in improving the English vocabulary skills of class VIII students of SMP Negeri 2 Alla.

Based on the results of data analysis, it can be seen that the initial ability of students in learning is obtained through the scores of the test questions given (pre-test and post-test), namely the pre-test scores show that the average score obtained by students is 52.50. The distribution of scores showed that no students (0%) obtained excellent, excellent, or good categories. While five students (33%) received the moderate category, 11 students (46%) were in the poor category, and five students (12%) got the inferior category based on the pre-test results and vocabulary achievement before the application of the Words of Wonders Application.

The pre-test results of students in class VIIIB SMP Negeri 2 Alla showed that they had not understood and mastered the basic vocabulary material in English. Therefore, most students gave incorrect answers to the test due to their lack of vocabulary knowledge. This condition might be caused by the lack of independent practice and the lack of serious attention from teachers on the importance of vocabulary mastery. In addition, the results show that limited experience in engaging and interactive learning also affects students' low vocabulary skills. Many conventional approaches fail to attract students' interest, thus not creating a supportive learning environment. Learning effectiveness is greatly influenced by the material delivery method and the application of appropriate learning strategies.

Post-test results showed a significant improvement in the vocabulary acquisition of students in class VIIIB SMPN 2 Alla. For example, students can now recognize basic vocabulary such as hobbies and weather and are able to use them in conversations, questions, and answers in English. This shows significant progress after they received the treatment. This means that using mobile technology through a gamification application significantly improves students' vocabulary acquisition in vocabulary learning. Mobile applications designed with game elements allow students to learn vocabulary in a more interactive and fun way, thus increasing student motivation and engagement in the learning process. As stated by Kubra et.al (2023) in their research, mobile applications with gamification features can improve vocabulary acquisition in language learning.

The average score obtained by students before receiving treatment was 52.50, while the average score after receiving treatment increased to 87.71, with a 35.21-point difference. This shows that the intervention or treatment given using the Words of Wonders application has a positive impact on improving students' English vocabulary skills.

In the paired sample test that was carried out, the results show that H0 was rejected and H1 was accepted with the criteria if Sig. <0.05 means there is an increase, and vice versa. If Sig > 0.05, it means there is no increase. Based on the results of the paired sample test, the Sig. A Value of 0.000 was obtained, which shows that Sig. 0.000 < 0.05 so that the ore-test and post-test results experienced significant changes. Thus, H0 is rejected and H1 is accepted. Therefore, it can be concluded that using the Words of Wonders application can improve students' English vocabulary in class VIIIB SMP Negeri 2 Alla.

In conclusion, students face various barriers in their vocabulary development, ranging from limited comprehension to a lack of attractive learning media. However, the application of Words of Wonders app, which utilizes the puzzle game feature proved to be effective in improving students' vocabulary acquisition. Using visual media to provide engaging activities, the Words of Wonders app successfully creates a more interesting and active learning environment.

This result of the this research shows that the implementation of four treatment sessions using the “words of wonder” application is effective to improve students' vocabulary skills. The application of Words of Wonders in English vocabulary learning is effective because, in its presentation, students can identify vocabulary by arranging letters, making it easier for them to practice their vocabulary skills. This will motivate students to get used to identifying vocabulary from several words found.

However, the implementation of learning using the Words of Wonders app should be complemented by interactive activities, which include the educator's ability to stimulate creativity, increase motivation, and excite students. The goal is for students to actively participate in English conversations and expand their vocabulary. Educators should also ensure that students understand their speaking needs and continue to encourage their commitment to mastering new vocabulary.

In this study, researchers used the Words of Wonders application as a mobile- based vocabulary learning medium. The utilization of mobile applications in learning activities has proven to improve students' vocabulary mastery because it presents an interactive and fun learning experience through gamification elements. In addition, an engaging learning design can also foster student interest and motivation during the learning process. This aligns with the findings of Kubra et al. (2023), who found that mobile applications with gamification features effectively support language vocabulary acquisition⁴⁰. This result is supported by Putra et al. (2022), who showed that the use of the Words of Wonders application is significantly more effective in improving students' vocabulary, and group

learning is better than individual learning. Although this study did not compare individual and group learning, the significant improvement results confirm the effectiveness of the Words of Wonders app as a vocabulary learning medium.

In addition, this study is also supported by Jurasni's (2019) findings which show that using games in vocabulary learning can increase students' interest and ability. Similarly, research conducted by Fairus Suryani (2021) found that the use of visual media in vocabulary learning effectively improves the ability to remember and use new vocabulary, with a student success rate of 78%. This increase shows that technological media, such as mobile applications and games, positively contribute to students' vocabulary acquisition.

This research has several significant differences that provide new contributions to the study of English vocabulary acquisition through the utilization of technology-based applications. First, in terms of methodological approach, this study uses a pre-experimental design with pre-test and post-test in one group, which allows in-depth analysis of changes in students' vocabulary skills directly after the Words of Wonders app intervention. This approach provides a more focused picture of the app's effectiveness in a real classroom learning context.

In addition, the population and samples used in this research are different from previous. This study specifically sampled the VIII grade students of SMPN 2 Alla, which was located in a rural area, which has its own characteristics and challenges in learning English. The different research location, namely at SMPN 2 Alla Enrekang, also provides a new context that has not been widely explored in similar studies, so that the results can be an important reference for schools with similar conditions and backgrounds.

Furthermore, the analytical framework used in this study focuses on the effectiveness of Words of Wonders app in improving vocabulary acquisition, by measuring aspects such as mastery, speaking, and writing in an integrated manner. This study specifically evaluates the impact of the app on students in grade VIII of SMPN 2 Alla, thus providing a new perspective on the implementation of technology in vocabulary learning at the junior high school level. This unique combination of methodological approach, population, location, and focus of analysis makes this study a valuable reference for the development of future research in the field of educational technology and language teaching. Based on the previous results and explanations, the success of the Words of Wonders app in improving students' vocabulary acquisition can be seen from several theoretical aspects. First, the app applies contextual

learning principles with each level's unique theme, making the game interesting and challenging. Second, the app uses a strong visual approach through a grid of letters that must be connected. Students not only see the word, but also actively form the word with finger gestures on the screen, which creates a deeper learning experience. Thirdly, the gamification element in the app provides intrinsic motivation through a multilevel system, daily rewards, and increasingly complex challenges. This creates a learning atmosphere that is fun and not boring (Nurdian, 2024).

4) CONCLUSIONS

Based on the data and the analysis results, it can be concluded that the Words of Wonders application significantly improved the English vocabulary mastery of second-year students at SMPN 2 Alla. The findings showed a marked increase in students' post-test scores compared to their pre-test scores, indicating that using interactive and engaging digital media such as Words of Wonders can effectively enhance students' vocabulary acquisition. The improvement was evident in the quantitative data and students' increased motivation and participation during the learning process. Therefore, it can be inferred that integrating educational technology, specifically the Words of Wonders application, into English language teaching provides a positive and impactful contribution to students' vocabulary development. This study supports innovative learning media to address low interest and achievement in English vocabulary among junior high school students.

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