

The Influence of Interactive Multimedia E-dictionary cards on the English Learning Outcomes of Class VII Middle School Students

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Abstrak

The influence of using interactive multimedia e-dictionary cards on student learning outcomes and its potential to aid teachers in the teaching process is examined in this study. A quantitative experimental approach was employed for this research. The study was conducted with a sample of 60 students, selected from the entire seventh-grade population of SMP Negeri 7 Padang, totaling 252 students across 8 classes. The sample consisted of Class VII.7 (the control group) and Class VII.8 (the experimental group). Data were collected through the observation of student activities using observation sheets and by administering written tests. The analysis of the data revealed that it exhibited a distribution pattern similar to a normal distribution and displayed uniform homogeneity levels. Furthermore, the use of interactive multimedia e-dictionary cards had a significant impact on the learning outcomes of the students. In conclusion, this research suggests that the use of interactive multimedia e-dictionary cards in the English language subject by seventh-grade students at SMPN 7 Padang has the potential to lead to improved learning outcomes for the students.

Article Info

Abstract

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1. INTRODUCTION

English language learning at the SMP/MTs level is in phase D, which focuses on strengthening spoken English and strengthening written language skills. In this phase, students can use various types of texts such as narrative texts, descriptions, procedures, special texts such as short messages and advertisements, and authentic texts as the main reference or references in learning English. English is a subject that consists of knowledge (knowledge) and skills (application) components. The knowledge component includes at least grammar, vocabulary, spelling, pronunciation, while skills include listening, speaking, reading and writing. The aim of learning English in SMP/MTs is targeted at making students able to use English functionally and per formatively. However, in reality, students' abilities in language skills still experience obstacles. Simply put, students' ability to understand an English sentence still has difficulties. The media currently used by teachers is still not sufficient and is still not in accordance with the needs of learning in the classroom so that there is no increase in student motivation in learning in the classroom.

Based on the results of interviews and observations, researchers found that the learning media used in English subjects, especially in material regarding Present Simple: Positive and Negative in the form of textbooks and PowerPoint, did not help students' understanding in terms of vocabulary that did not have direct translation and was less interactive. After conducting classroom observations according to the researcher's observations, it was seen that the learning process in the classroom was quite passive because when the teacher was explaining in front of the class the students focused on paying attention to the teacher's explanation only for the first 5-10 minutes after which the students carried out activities that were not related to other teaching and learning processes. When conducting observations, researchers also observed a tendency for students' low interest in learning because low understanding of vocabulary made students also have difficulty understanding English learning.

In the interview conducted, the teacher also revealed that the teaching and learning process for class VII English at SMPN 7 Padang was carried out using teaching resources in the form of textbooks and powerpoint media. Students revealed that there is still no variation in the learning process because teachers only rely on learning materials in the form of textbooks as a source of material and media in the form of Powerpoint which contains a lot of writing, not accompanied by pictures, videos, attractive displays, and media that is less interactive to support the explanation of the material. . The cause of students' lack of interest in following the learning process is because in textbooks and PowerPoint there are pictures or examples of forms of material that can be observed by students, with textbooks learning occurs in one direction because it tends to be used passively and there are no explanations such as understanding. of each word in a text so that when the teacher asks questions about the material there is no feedback from students so that students find it difficult to understand the material in the learning process.

Based on the Independent Curriculum, especially in phase D, learning focuses on strengthening spoken English and strengthening written language skills. In this phase, students can use various types of texts such as narrative texts, descriptions, procedures, special texts such as short messages and advertisements, and authentic texts as the main reference or references in learning English but in the textbook and PowerPoint the material only contains limited writing and images. Without the assistance of word-to-word translation, students need to be given space to explore their knowledge through other supporting media. Learning by relying on teacher explanations without supporting media results in difficulties for students in understanding the lesson. The learning media that have been used so far, namely textbooks and PowerPoint, have not been able to enable students to better master the material in learning English, especially in understanding vocabulary and sentence structure (grammar).

With these many problems, the impact on student learning assessment results still shows a low level, with an average Daily Assessment score of 60 in class VII.7 and an average of 64 in class VII.8. These figures indicate that student learning outcomes are still below the average score usually obtained in English subjects. This data is supported by a statement from the class VII English teacher on May 18 2023. This condition is one of the reasons why student learning outcomes are still low.

(Ly, et al 2023)revealed that there were changes in the learning outcomes of class X students at SMAN 4 Kupang. This influence can be seen in the learning outcomes of students in the control class and in the experimental class. There was a difference between the pre-test and post-test scores which increased significantly in the experimental class, while in the control class there was an increase in pre-test and post-test scores which was not very significant. This shows that the application of interactive multimedia in the experimental class shows more positive and superior results compared to learning using conventional methods.

(Noge, 2018)also added that the use of the Bilingual Preview-Review learning model based on E-Flashcards in English learning has been proven to improve student learning outcomes and increase student learning completeness from cycle I to cycle II.

Based on the context presented, the author feels interested in conducting research on Influence interactive multimedia e-dictionary cards with the title The Effect of Interactive Multimedia E-dictionary Cards on the English Learning Outcomes of Class VII Students at SMPN 7 Padang

2. RESEARCH METHOD

This research is quantitative research that uses quasi-experimental methods. The main focus is to determine the effect of using interactive multimedia in the form of e-dictionary cards as one of the tools used in an effort to increase the achievement of student learning evaluation results in English subjects taught at SMPN 7 Padang. This research involves comparing learning outcomes between two different groups of students in the learning process. First, there was an experimental class group that received teaching using interactive multimedia e-dictionary cards as the main tool in the learning process. Meanwhile, there was a control group who used printed books and

PowerPoint presentations as the main method in their learning process. In this study, a purpose sampling technique was used which involved 60 students as research samples. This sample consisted of two groups, namely 30 students from class VII.8 as the experimental class group, and 30 other students from class VII.7 as the control class group. The data required for this research was collected through two methods, namely observing student activities using observation sheets and through giving written tests. Thus, this research was designed to provide a deeper understanding of the influence of interactive multimedia in improving student learning outcomes in English subjects at SMPN 7 Padang.

3. RESULTS AND DISCUSSION

A. Data Description

Use interactive multimedia e-dictionary cards in class VII SMP in English subjects has a significant impact on students' learning. This fact is supported by data analysis of test results, which have been tested for normality and homogeneity and tested through the hypotheses listed in the following table:

Table 1. Data Results Learning of experimental class students

Interval Class	Midpoint	F
48-54	51	3
55-61	58	5
62-68	65	8
69-75	72	3
76-82	79	4
83-89	86	7
Amount		30

Viewed. From the table above, the interval range with the highest frequency is 62-68 and the lowest frequency is the interval 48-54 and 69-75.

Table 2. Data on Control Class Learning Results Using Package Books

Interval Class	Midpoint	F
40-47	43.5	1
48-55	51.5	9
56-63	59.5	3
64-71	67.5	5
72-79	75.5	7
80-87	83.5	5
Amount		30

Based on the table presented, the interval with the highest frequency is 48-55, while the interval with the lowest frequency is 40-47. Next, there is a comparison of student learning outcomes data from the groups that use interactive multimedia (experimental class) and groups using textbooks and PowerPoint (control class) were arranged. This data will be used to test normality, homogeneity and hypotheses by applying the t-test.

Table 3. Comparison of Student Learning Outcome Data for Experiment Class and Control Class

VARIABLES	Using Learning Videos	Use Package Books and PowerPoint
N	30	30
Highest Score	88	84
Lowest Score	48	40
Number of Values	2102	1912
Average	67.2	65.63
elementary school	12.36	12.95
Variance	152.76	167.7

Source: Data processed by researchers

B. Data analysis

To carry out hypothesis testing about the effect of use interactive multimedia on Class VII students' learning outcomes in the English subject at SMPN 7 Padang, tested for normality and homogeneity on the data first. After the data has been tested according to the analysis requirements, the next step is to carry out hypothesis testing.

1. Normality test

From the results of normality testing in the experimental group, it was found that the L count was 0.5233 with a sample of 30. The L value in the table was 0.161 with a significance level of α 0.05. Based on this, it can be concluded that Lcount is smaller than the Ltable value. Therefore, it can be interpreted that the data in the experimental group as a normal distribution. Test results Normality in the control group showed Lcount of 0.2587, while the Ltable value was 0.161 at a significance level of α 0.05. In this case, because Lcount is also smaller than Ltable, therefore the data in the control group also follows a normal distribution.

Table 4. Comparison of Lilifors Test

Class	elementary school	N	L count	Table. α 0.05	Information
Experiment	12.36	30	0.5233	0.161	Normal
Control	12.95	30	0.2587	0.161	Normal

Source processed by researchers

1. Homogeneity Test

Table 5. Homogeneity Test Results. In Both Sample Classes

Class	SD2	N	χ^2 count	χ^2 table α 0.05	Conclusion
Experiment	152.76	30	0.063	3,841	Homogeneous
Control	167.7	30			

Source: Data processed by researchers

FromThe table above shows that the results of the homogeneity of variance test by carrying out the data in the final test in both sample classes turned out to be $\chi^2 = 0.044$ and $\chi^2 = 3.841$ with a real level of $\alpha = 0.05$. From the results of the analysis, it can be seen that the value of χ^2 calculated is more lower than the table χ^2 value ($0.044 < 3.841$). Therefore, it can be concluded that the variance between classes the experimental and control classes are homogeneous.

2. Test Hypothesis

Table 6. Hypothesis Testing

Aspect	Experiment	Control
N	30	30
\bar{X}	70.07	63.73
SD^2	152.76	167.7

Source: Data processed by researchers

$$t = \frac{X_1 - X_2}{\sqrt{\frac{SD^2 X_1 + SD^2 X_2}{N_1 - 1 + N_2 - 1}}}$$

$$t = \frac{70,07 - 63,73}{\sqrt{\frac{152,76 + 167,7}{30 - 1 + 30 - 1}}}$$

$$t = \frac{6,34}{\sqrt{5,2675 + 5,7827}}$$

$$t = \frac{6,34}{\sqrt{11,0502}}$$

$$t = \frac{6,34}{3,12}$$

$$t = 2.032$$

You can see the results of hypothesis testing using the t-test which produces the following results.

Table 7. Research Hypothesis t Test Results

Class	\bar{X}	Qcount	Qtable α 0.05	Conclusion
Experiment	70.07	2,032	2.00	Significant
Control	63.73			

Source: Data processed by researchers

In Table t with dk $(N_1 - 1) + (N_2 - 2)$ for α 0.05, namely 2.00. Results are compared with . To see the table, first calculate $df = (N_x - 1) + (N_y - 1)$, so $df = (30 - 1) + (30 - 1) = 29 + 29 = 58$. There is a significant influence with the use of interactive multimedia on learning outcomes in English class VII SMP. This finding shows that the tcount value of 2.032 far exceeds the ttable value of 2.00. So it is concluded that "The significant influence of the use of interactive multimedia on learning outcomes in the English subject for Class VII SMP" is acceptable. This indicates that the use of interactive multimedia has the potential to influence learning outcomes in English subjects for class VII students in junior high school. $t_{hitung} > t_{tabel}$

This is also in accordance with findings in several previous studies. The results of relevant research, such as that conducted by Atibrata and his colleagues in 2019, indicated that after analyzing data on student learning outcomes, it was seen that there was a significant increase in

the average score of students' learning achievement in the sub-material expressions after implementing the method. learning that uses interactive multimedia in junior high schools Ali Maksu Yogyakarta.

Likewise with this research, according to the explanation above based on existing data, the conclusion that can be drawn is that there is a difference in average scores between students in class VII.8, which is the experimental group, and students in class VII.7, which is the control group. Furthermore, it can be seen that there is a significant influence. from the use of interactive multimedia on the learning outcomes of class VII students in English subjects in class VII SMPN 7 Padang.

4. CONCLUSION

The use of interactive multimedia significantly influences learning outcomes in English subjects for class VII students at SMPN 7 Padang. This finding received strong confirmation from the results of the data which showed that students who took part in learning through interactive multimedia, which was included in the experimental class, achieved a higher average score compared to students who studied using textbooks and PowerPoint presentations as learning resources, which is part of the control class.

5. THANK-YOU NOTE

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