

THE EFFECT OF WORD MAPPING STRATEGY IN TEACHING VOCABULARY FOR CLASS VI STUDENTS OF SD NEGERI 18 BENGKULU CITY

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Abstract

This research aims to determine the effectiveness of the Word Mapping Strategy on students' understanding mastery at SDN 18 Bengkulu City, as observed by seventh-grade students at SDN 18 Bengkulu City. The method employed in this research is a quantitative approach with an experimental design. The population of this study was students at SDN 18, Bengkulu City. This research was conducted with two groups, namely the experimental class using the Word Mapping Strategy and the control class without using the Word Mapping Strategy. First, the researcher gave a pre-test to both classes. After that, the researcher gave a post-test to both classes. Pre-test and post-test scores are collected from multiple-choice tests. Then analyzed using the SPSS 26 window. The findings of this research indicate that teaching and learning using the Word Mapping Strategy is effective. The average score of the experimental class from the pre-test was 50,4, and the post-test was 76,9. This is proven by the t-count value (5.094), which is greater than the table at the 5% significance level. Next, the hypothesis test obtained a 2-tailed sig (p of 0.00 while alpha (α) was 0.05 ($0.00 < 0.05$). So, the effect of the Word Mapping Strategy in teaching comprehension has a significant effect on students' mastery. The magnitude of the effect obtained is based on the ANCOVA test, obtained from the count < f table. So it is concluded that it has an influence, for as large an influence as the percentage of influence can be seen in the partial eta squared column table, the effect is 0.058 or 58%.

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1. Introduction

English as an international language is used as a communication tool in everyday life and academic activities. Bimas, Netty, and Hajra (2020) stated that English is a foreign language taught in elementary schools, middle and high schools, and universities in Indonesia. In this perspective, the most important aspect of language training is vocabulary. Busran (2009) Vocabulary is defined as the substance and function of linguistic words that have been used and taught so that in the future, children can acquire "hearing, speaking, reading, and writing". According to Humairoh and Amin (2023), vocabulary is a collection of words that are owned by a person or other body, or are part of a particular language.

Idham (2011) states that vocabulary is the main foundation of language, the element of meaning that is the basis for forming larger systems such as sentences, paragraphs, and entire texts. So, according to several expert opinions above, vocabulary is defined as the set of all the words that a person understands or all the words that a person might use to construct new sentences.

Many students still have difficulty learning English, especially mastering vocabulary. This condition is commonly experienced by students at junior high, so it is not surprising if they are unable to communicate or speak well due to a lack of understanding. However, one of the components of English that is taught to students is vocabulary because it plays a major role in all language skills. The lack of teaching materials and principles, as well as confusing vocabulary theories, which tend to reduce vocabulary mastery and learning, seem to be influenced by the complexity of the material (Rosa & Eskenazi, 2011). Compared with other aspects of language, which are more important, according to a linguistic perspective, comprehension seems to be more useful and urgent than the role of grammaticality. According to Allen (1999), Lack of interest, lack of motivation and self-confidence, teachers, and the environment are several factors that hinder students' ability to learn vocabulary. The use of language helps students communicate well, understand the meaning of words, and speak fluently.

Therefore, in mastering English, first, students need to know about the four main skills such as writing, reading, listening, and speaking. Before mastering these skills, they must master English. Because of the language learning process, students need skills to convey and express their ideas or understanding of reading texts. In addition, students who have low comprehension will experience difficulties in understanding written and spoken language. So it concludes that by having a lot of understanding, it will be easy to learn English.

Researchers provide an alternative to problems in teaching comprehension by using the word mapping strategy. Graves (2008: 94) defines word mapping strategies as one of the most effective strategies in teaching skills because it involves students in thinking about word relationships. This strategy encourages students' active exploration of word relationships, thereby leading to a deeper understanding of word meanings by developing their knowledge of concepts related to words. Word mapping strategy is a visual organizer that encourages vocabulary development. By using it, the students can see and understand the relationships between words, and they can learn to understand with their background or experience. The students are expected to be able to apply it in sentences and even in real communication. With the word mapping strategy, students can more easily learn to

write and read. In addition, this strategy involves students as active learners. It also helps students develop broader concepts and definitions, or synonyms and antonyms.

Researchers received information from schools that there were still some students who had difficulty using vocabulary in sentences without practice and more accurate explanations. Based on the researcher's observations at SD Negeri 18, Bengkulu City, in December 2023, the researcher found that students were less motivated in learning English, especially in terms of understanding English. Apart from that, students also found it difficult to remember the vocabulary that has been explained by the teacher, and all of those are proven by the results of their English scores the which have not yet reached completeness. It could happen because when learning, students do not pay enough attention to the teacher's explanation of the materials. The researcher looked for information and looked at the teacher's teaching module, where vocabulary learning was only carried out twice a week. Some teachers lack variety when carrying out the learning process, so that it is monotonous, which results in students feeling bored learning English. Teachers there only use conventional methods, such as lecture methods, and also only use blackboards and books. The lack of interesting learning media made students bored quickly. Researchers also confirmed from English teachers there round students' difficulties and teachers' approaches in teaching vocabulary. Based on the results of the students' scores at SMP Negeri 18, Bengkulu City, interactive learning media were needed. Setiawan & Wiedarti (2020) stated that teachers must provide media that can motivate students and make them more interested in learning English vocabulary.

Researchers investigated whether the increase in vocabulary mastery using the Word Mapping strategy was significant or not, and how effective it was in increasing vocabulary mastery using the Word Mapping strategy. Therefore, researchers conducted pre-experimental research on class VI students of SD Negeri 18, Bengkulu City, for the 2023/2024 academic year.

In short, by conducting this research, researchers obtained quite a lot of information, which is expected to help teachers maximize their teaching process and improve students' vocabulary mastery through the use of the word mapping strategy. Teachers needed to pay more attention to how they could use the word mapping strategy to manage the classroom effectively so that students are actively engaged, working together with their classmates to improve their learning. It is hoped that the more information teachers can obtain from this research, the more information teachers can obtain from this research to be in their learning process.

2. Method

This design of research is often used in classrooms when experimental and control groups are naturally assembled groups as intact classes, which may be similar (John and James, 2006). Intact classes meant that the seventh-grade students in the experimental group and the control group had the same competence and the same English teacher.

This research attempted to find out how to improve students' vocabulary Mastery through the word mapping strategy. All of them were given a pre-test and a post-test. The pre-test was given before treatment. After the treatment, the two classes were given a post-test. The result of the post-test was compared with the pre-test score of each class. It will be done in order to see improvement in students' vocabulary Mastery through the word mapping strategy.

This research was conducted at SD Negeri 18, Bengkulu City, on class VI students in the even semester of the 2023/2024 academic year on Jalan Cempaka, Kec. Ratu Agung, Bengkulu City Province, Bengkulu. First, I observed, SD Negeri 18 Bengkulu City was a school full of achievements. Many students are interested in studying at this school because this school produced many outstanding students who are different from other schools. There were 10 classes for seventh grade. The facilities at SD Negeri 18, Bengkulu City, were a library, laboratory, administration, UKS, mosque, and principal's office. The population of this research consisted of the 6th Grade of SD Negeri 18 in Bengkulu City, comprising 60 students in total. In taking the sample, the researcher chose class VI.7 as a controlled class, which has 30 students, and class VI.8 as an experimental class, which has 30 students. The researcher took two classes that were divided into two groups. The first class was the experimental class (VII.7), which consisted of 30 students, and the second was the control class (VII.8), which consisted of 30 students. The experimental class was given the treatment by using the word mapping strategy, and the control class was given the treatment conventionally (group discussion).

The instrument in this research was a vocabulary test. The test in this research was used to find out the mastery of students' vocabulary after learning with colored pictures. In this test, the researcher gave multiple-choice forms. The researcher used the same test items for both classes (subject of the research). Furthermore, Vocabularies were tested based on the mastery of vocabulary targets in the curriculum and materials that were going to be taught. The Vocabulary test consists of 25 items in multiple-choice form. Those items were taken from the question and task book, which was used by the school. The researcher did the pre-test and post-test for all of the samples. A pretest was given for the control and experimental classes. The data were collected by giving the test to the students. One of the most important steps in doing research is collecting data to find out the results of the

research. The procedures of data collection followed some steps. The data for this research were collected from the scores of the pre-test and post-test.

3. Result and Discussion

After carrying out normality and homogeneity tests, the researcher calculated the data using the t-test in SPSS to determine the significant differences between students' vocabulary mastery in the experimental class and the control class. Researchers used the t-test to determine the effect of word mapping strategies on students' mastery of vocabulary using SPSS. Researchers used data from post-test experimental and control classes and obtained scores from both classes. The t-test results of the post-test scores for the control and experimental classes are as follows:

Table 1 The T-Test Result of Post Test for both Experimental and Control Classes

Group Statistics					
	Group	N	Mean	Std. Deviation	Std. Error Mean
Nilai	1	30	67.07	6.005	1.096
	2	30	74.53	7.754	1.416

Note:

1 = Experimental

2 = Control Class

Table 2 Independent Samples Test

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hasil	Equal variances assumed	1.017	.317	-4.170	58	.000	-7.467	1.791	-11.051	-3.882
	Equal variances not assumed			-4.170	54.586	.000	-7.467	1.791	-11.056	-3.878

The post-test results for both the experimental class and the control class were obtained after the treatment was carried out. Based on the data in Table 1, it can be seen that there is a significant difference between the experimental class ($M=67.07$ and $SD=6.005$) and the control class ($M=74.53$ and $SD=77.54$). Then the researchers compared the t values and tables to find out whether the word mapping strategy in teaching comprehension was effective in increasing students' understanding or not. After calculating the data in Table 2, the t -count value was 4.170 with Sig. (2-tailed) 0.00, and a table of 0.05 (5%) because the significance level is 1.671 with a df of 58. It is known that t -count=4.170, t -table 1.671, and sign (2-tailed) $0.00 < 0.005$. This means that the word mapping strategy is effective in students' vocabulary mastery.

The purpose of the F test is to determine whether the independent variables have an effect on the dependent variable simultaneously or collectively. To determine the combined impact of all independent variables on the dependent variable, the F test is used. The dependent variable can be simultaneously influenced by the independent variable, or vice versa, if the significant value of $F < 0.05$ is obtained at the 0.5 or 5% level (Ghozali, 2016).

To ascertain whether the independent variables have a joint or simultaneous influence on the dependent variable, apply the simultaneous F test (Simultaneous Test). One type of hypothesis testing that allows conclusions to be made based on data or statistical group conclusions is called ANOVA statistical testing. The F value in the ANCOVA table is used to make decisions based on the test results, and a significance level of 0.05 is applied. According to Ghizali (2016), the F test has the following provisions: H_0 is rejected and H_1 is accepted when the significance value F is less than 0.05. This indicates that every independent variable has a noteworthy impact on the dependent variable, and H_0 is accepted, and H_1 indicates that the independent variable has no discernible effect on the dependent variable if the significance value of $F > 0.05$. The following table displays test results for pretest and posttest data from class experiments.

Table 3 ANCOVA Statistical Testing (F Test)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	42.361 ^a	1	42.361	1.735	.198	.058
Intercept	9050.671	1	9050.671	370.763	.000	.930
Pre_Test	42.361	1	42.361	1.735	.198	.058
KelasExperiment	.000	0	.	.	.	.000
Error	683.506	28	24.411			
Total	178288.000	30				
Corrected Total	725.867	29				
a. R Squared = .058 (Adjusted R Squared = .025)						

From the results of the *f-test*, it can be seen that the significant value for the effect of word mapping strategy in teaching vocabulary (Class Experiment) *f-count* 1.735 > from *f-table* 4.20, it proves that H_0 is rejected and H_1 is accepted, meaning that there is a significant effect word mapping strategy in teaching vocabulary. So, if you compare the experimental class with the control class using the word mapping strategy, it has an effect of 58% based on the partial eta squared table.

Based on data analysis on class VI students at SDN 18 Bengkulu City, there is a significant influence on the mastery of understanding of students who are taught using the word mapping strategy. The test data results are divided into pre-test and post-test. Students who were taught using word mapping strategies had higher scores than students who were taught without word mapping strategies. In analyzing the data, the researcher analyzed the pre-test and post-test hypotheses for both the experimental class and the control class to find out whether the use of the word mapping strategy was significant for students' mastery of mathematics or not. Researchers analyzed by carrying out a *t-test* using SPSS with a significance level of 5% (0.05), so the criteria were a *p-value* of 4.170 and a table of 1.671. (*2-tailed*) is $0.000 < 0.005$. The calculation means that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_2) is accepted. It can be concluded that there is a significant difference in students' vocabulary mastery by using word mapping strategies in the learning process.

Based on the explanation above, the researcher concludes that the use of word mapping strategies has a significant impact on students' vocabulary mastery, particularly for students at SDN 18 in Bengkulu City.

After calculating the normality test using SPSS, it can be proven that the pre-test and post-test data for the experimental and control classes are both normally distributed. It can be stated that the experimental and control class data are much less than the Lilliefors table calculations, where the critical point is 30. The results of the pre-test data for the experimental class are 0.119, while the data for the control class are 0.186, and the results of the post-test data for the experimental class are 0.192, while the data for the control class are 0.138. It can be concluded that all the data used in this research are normal.

Furthermore, based on the results of the data homogeneity test, the experimental class and control class became homogeneous data groups. This can be seen from the results of the pre-test significance of the control and experimental classes being greater than the significance value of 0.005, and the results of the post-test significance of the control and experimental classes being 0.317, which is higher than the significance value of

0.005. significant value 0.005. Therefore, the data group is proven to fall into the homogeneous data category.

The results of this test are also in line with research conducted by Dwi Wahyuni Utami, which concluded that data analysis shows that the word mapping strategy is effective in vocabulary learning. The results of this research are $t_{test} \geq t_{table}$ ($7.61 \geq 1.67$) for a significant level of 0.05, H_a is accepted. This means that the word mapping strategy is effective in vocabulary learning in class 7 of SMPN1 Plupuh class of 2015/2016. So it can be concluded that the word mapping strategy is suitable for teachers to apply for vocabulary learning. The results of researchers Hediza, Gatot, Endang concluded with the title "The Use of Word Mapping Technique in Teaching Vocabulary", clearly show that there is a significant difference in student achievement before and after the Word Mapping technique is applied, and the use of this technique has a significant effect. Significant impact on students' vocabulary mastery as shown by the increase in students' posttest scores. It can be concluded that the use of the Word Mapping technique is effective in teaching vocabulary to class VII A students at SMP Negeri 14 Pontianak in the 2015/2016 academic year. Finally, researcher Satuna Indah Wardani concluded that this research was conducted using classroom action research in two cycles, and each cycle consisted of four meetings. The research subjects were 34 students in class III of the Accounting Department at SMK Negeri 1 Pamekasan. The research was conducted for one month. The instruments used to obtain primary data and secondary data were vocabulary tests, student observation sheets, and respondent questionnaires. The test results from the initial stage to the tests in the second cycle showed an increase in the number of students who completed the test. Hopefully, these results will be useful for both teachers and students, whose harmony will provide progress in learning English, especially mastery of vocabulary.

4. Conclusion

After experimenting with teaching vocabulary by using the word mapping strategy in the experimental class and without using the word mapping strategy in the control class, the researcher found that the data in the experimental class had the lowest score is 50,4 and the highest score is 76,9. Meanwhile, in the control class are the lowest score is 47,1 and the highest score is 67,0. Then, the researcher continues to calculate the data, and the researcher concluded the data is a significant difference in students' vocabulary mastery is the experimental and control classes. Then, the result showed that the gain score of the experimental class, which was given the word mapping strategy as a treatment, and than treatment of the control class. Statistical analysis using SPSS 26 shows an F test value of

7.774 with a sig.0.009 value. It can be concluded that the effect is 0.009, so it is said to be effective for increasing vocabulary mastery.

It can be concluded from the data about so using the word mapping strategy in the learning process in the classroom has a significant effect on the students' vocabulary mastery. The researcher suggested that English teachers, the teacher can use the word mapping strategy as an alternative for learning vocabulary. Then make the students become the students active learners.

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