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DEVELOPING STUDENTS' VOCABULARY MASTERY THROUGH HIDDEN OBJECT GAME

***Gayatri Ningsi[1)], Darmawan[2)], Wahyudin[3)]**

[1,2,3)]English Education Study Program, Teacher Training and Education Faculty
Tadulako University, Palu

*****gayatriningsi@gmail.com

ABSTRACT

The objective of this research is to find out if the use of Hidden Object Game can develop vocabulary mastery to the eighth grade students of SMP Negeri 4 Palu. This research employed a quasi-experimental research design that involved experimental group and control group. The sample of this research was class VIII Apel with 33 students as the control group and class VIII Rambutan with 33 students as the experimental group, selected by using purposive sampling technique. The data was collected by administering a vocabulary test consisting of a pre-test and post-test. Then the treatment was only given to the experimental group. The result of the pre-test of the experimental group was 51.43 while the control group was 52.47. The result of the post-test of the experimental group was 81.73 while the control group was 68.74. The data were analyzed statistically in order to find out the significant difference of students' achievement in the pre-test and post-test by using the t-test formula. By applying 0.05 level of significance where the degree of freedom (df) is 64, the researchers found that the value of the t-counted (5.03) is higher than the t-table (1.99). It means that the research hypothesis is accepted. In conclusion, the use of Hidden Object Game can develop vocabulary mastery to the eighth grade students of SMP Negeri 4 Palu.

Keywords: *Develop; Vocabulary Mastery; Hidden Object Game*

INTRODUCTION

Vocabulary is an important basic element in learning English that learners should master well. According to Harmer (1991), vocabulary is the basic part and a key element to learning any language. To learn English, students need vocabulary in their attempts to use English. When we want to express our ideas to others, we must use words and arrange them in good sentences. Knowing vocabulary means knowing the meaning of the word. Because without knowing more about vocabulary, students cannot understand and speak English well. It means that the students cannot write words or sentences well when they do not master it. This means that vocabulary is very important for every learner who wants to master English. The more vocabulary we know, the easier it will be for us to understand the sentences we hear or read. Therefore, learners will find it difficult to master English if they do not learn vocabulary or if their vocabulary is lacking.

According to curriculum 2013, grade eight students are expected to be able to identify the form and meaning of the specific noun, adjectives, verbs, adverbs, etc. They are expected to be able to use noun related to people, animals, and things around the house, classroom, and school. They are also expected to use the kinds of words in spoken and written ways. Based on the preliminary observation at SMPN 4 Palu, the researchers found the fact that most of the students lack vocabulary. When the researchers interviewed a teacher who taught English there. The teacher explained that the students had a lot of difficulty remembering vocabulary or new words in English. Therefore, they face difficulties communicating with each other and they do not know how to transfer their idea or feelings in spoken and written ways. The reason why this can happen is that students in junior high school feel difficulty in learning and understanding English vocabulary because the way to write English words is different from how to pronounce the words well. Secondly, they do not practice vocabulary that has been taught by teachers at school in their daily life, which makes them quickly forget vocabulary. Lastly, they are not interested in English because the teaching and learning process of English makes them bored.

The teacher must find more effective and creative techniques to teach vocabulary during the English learning process. Techniques must be interesting, enjoyable, and comfortable which makes students motivated to learn. So that students can enrich their vocabulary and enable them to speak or write English words well. There are many methods to improve English vocabulary mastery, one of them is by applying games as a technique to improve students' vocabulary mastery. Saleh and Ahmed (2022) state that games are an effective tool to teach vocabulary to young learners. In other words, by using games the students will feel fun when they study English Language and the "Hidden Object Game" is one of the games which is suitable to be applied in the classroom to develop students' Vocabulary mastery.

A Hidden Object Game is a genre of puzzle game. The hidden object game contains objects that are hidden or mixed with other objects in the background image in such a way that each object fits perfectly into the local area of the background (Widiarsa, Marhaeni and Adnyani, 2017; Oey and Patterson, 2013). In this game, the player must find items from the vocabulary list of the object in

pictures. This hidden object media comes in many varieties, such as puzzles, games, and handouts. This media is usually associated with literary content, such as in the form of stories. This provides context for vocabulary, making it more meaningful and memorable. By playing this game, students will be trained to find out items based on the vocabulary lists in pictures and memorize them easily. Based on the explanation above, the researchers consider using Hidden Object Game as media in teaching to develop students' Vocabulary at SMPN 4 Palu.

METHOD

The researchers employed a Quasi-experimental design. The subject of this study was two classes, and there are an experimental group and a control group. The pre-test and post-test were given to both groups, but only the experimental group was taught through a hidden object game. The control group was given a pre-test and post-test without treatment. This research design aims to compare the results of the experimental group and the control group. The design of this research is proposed by Sugiyono (2019:110) as follows:

O_1	**X**	**O_2**
O_3	-	**O_4**

The population of this research was the eighth grade students of SMP Negeri 4 Palu. A population is a collection of human beings. According to Best and Kahn (2006), "The population is any group of individuals that have one or more characteristics in common that are interested in the researchers and selected for observation and analysis." The population of this research was the eighth grade students of SMP Negeri 4 Palu. They consist of 332 students divided into ten classes consisting of VIII Anggur to VIII Sirsak. Each class consists of 33 up to 35 students. In selecting the sample for this research, the researchers used a purposive sampling technique. The researchers divided into two classes, namely VIII Apel as the control group and VIII Rambutan as the experimental group for being the sample of the research.

In this research, the variable was divided into independent and dependent variables. The independent variable is the use of hidden object game, and then the dependent variable is the ability of the Eight Grade Students. The instrument of this research is a test. The technique used in collecting data in this research is the pencil and paper method. The test consisted of four kinds; multiple choice (10 numbers), scrambling (5 numbers), matching pictures (14 numbers), and making sentences (3 numbers). The researchers used tests in order to measure the students' vocabulary and to find out the achievements of the implementation of the Hidden Object Game in developing students' vocabulary mastery.

The test was given twice to the sample. Both the experimental group and the control group were given two tests, namely pre-test and post-test. The pre-test was conducted first, before giving the treatment in order to know the students' ability in vocabulary. Then, the post-test was conducted

to measure the performance of the students in using the Hidden Object Game in Vocabulary after getting the treatment.

Table 1 - The Scoring Range

No	Score	Category	Qualifications
1.	90-100	Excellent	Successful
2.	80-89	Very Good	Successful
3.	70-79	Good	Successful
4.	≤69	Poor	Failed

FINDINGS AND DISCUSSION

FINDINGS

The result of this research was analyzed statistically. The result of the test is taken by using pre-test and post-test as the instrument of the research. The researchers gave pre-test to the experimental group (VIII Rambutan) on Wednesday, February 15th, 2023, while for the control group (VIII Apel) on Thursday, February 16th, 2023. Then, the researchers conducted the treatment using Hidden Object Game for about six meetings. The topic was given based on the students' handbook on the school and another related source from the internet. The treatments were given to the experimental group on Tuesday, February 17th, until March 7th, 2023. After administering six treatments to the experimental group using Hidden Object Game and teaching the control group using the conventional method or teacher strategy, the researchers gave post-test for both groups.

The researchers conducted the pre-test before the treatment and gave the post-test after conducting the treatment by using the Hidden Object Game. The researchers gave a pre-test to the students in the first meeting to find out the student's vocabulary ability before giving the treatment. After treatment, the researchers gave post-test to the students in the last meeting. Furthermore, the purpose of the post-test was to know the significant difference between the students' ability in vocabulary before and after treatment. The result of the pre-test and post-test of the experimental can be seen in the following table:

Table 2 - Results of the Pre-test and Post-test of the Experimental Group

No	Initial	Score	
		Pre-Test (X_1)	Post-Test (X_2)
1	AH	37.14	88.57
2	AMP	42.86	88.57
3	ALF	77.14	85.71
4	AAF	42.86	71.43
5	AAZ	54.29	85.71
6	ARH	48.57	77.14
7	AMW	51.43	88.57

8	CSW	54.29	91.43
9	DA	85.71	100.00
10	DP	42.86	60.00
11	DAS	31.43	82.86
12	FDF	65.71	82.86
13	FH	37.14	71.43
14	IS	45.71	94.29
15	KAS	57.14	94.29
16	MAF	42.86	57.14
17	MA	48.57	91.43
18	MKW	57.14	77.14
19	MS	54.29	88.57
20	MAM	82.86	91.43
21	MPJ	51.43	94.29
22	MF	45.71	80.00
23	MRI	48.57	71.43
24	NRP	51.43	60.00
25	NAL	34.29	74.29
26	NSP	51.43	88.57
27	RSA	37.14	65.71
28	RZT	54.29	85.71
29	RR	51.43	74.29
30	SA	48.57	91.43
31	S	54.29	88.57
32	WK	40.00	62.86
33	YPN	68.57	91.43
Total		**1697.14**	**2697.14**
Mean		**51.43**	**81.73**

Based on the table above, the highest score of the pre-test of the experimental group is 85.71 and the lowest score is 31.43. There are 30 students who got score under 70. It means that only 3 students in the experimental group got successful. Then, the mean score achieved by the experimental group in the pre-test was 51.43. After that, the researchers gave the treatment to the experimental group. The table above shows that the post-test result of the experimental group significantly changes. The highest score of the post-test of the experimental group is 100.00 and the lowest score is 57.14. Then, the mean score achieved by the experimental group in the post-test was 81.73. There are only 5 students who got scores under 70. It means that 28 students in the experimental group got successful. The result of the pre-test and post-test of the control group can be seen in the following table :

Table 2- Results of the Pre-test and Post-test of the Control Group

No	Initial	Score	
		Pre-Test (X_1)	**Post-Test (X_2)**
1	AS	45.71	60.00
2	AFP	62.86	80.00
3	AD	34.29	74.29
4	AF	54.29	65.71
5	AAA	54.29	77.14
6	ARF	48.57	54.29
7	AS	48.57	74.29
8	BMP	37.14	57.14

9	DIR	62.86	85.71
10	DFZ	51.43	62.86
11	F	54.29	57.14
12	FF	57.14	62.86
13	FL	60.00	65.71
14	LZ	85.71	94.29
15	MES	42.86	85.71
16	MDL	40.00	60.00
17	MF	51.43	65.71
18	MZL	37.14	68.57
19	MH	34.29	77.14
20	MA	62.86	82.86
21	MRS	37.14	62.86
22	MF	45.71	54.29
23	MZI	54.29	65.71
24	NQ	65.71	68.57
25	NA	40.00	57.14
26	RAL	48.57	68.57
27	RMP	34.29	57.14
28	RH	80.00	88.57
29	SD	37.14	65.71
30	SAS	57.14	80.00
31	UNA	54.29	68.57
32	ZIB	51.43	62.86
33	ZIA	60.00	80.00
Total		**1691.43**	**2291.43**
Mean		**51.26**	**69.44**

Based on the table above, the researchers found that the experimental and control groups' individual scores and mean scores are different. The highest score of the pre-test of the control group is 85.71 and the lowest score is 34.29. There are 29 students who got scores under 70. It means that only 4 students in the control group got successful. Then, the mean score achieved by the control group in the pre-test was 52.47. The highest score of the post-test of the control group is 94.29 and the lowest score is 54.29. The mean score achieved by the control group in the post-test was 68.74. There are 23 students who got scores under 70. It means that only 10 students in the control group got successful. After comparing the results of the post-test scores of the two groups. From the result of the students' post-test scores showed a significant increase in the experimental group's post-test scores after being given treatment. As found in the experimental group's post-test score, the control group's score also increased. The researchers found that the data analysis of the group's mean score showed that the difference in the mean score between the experimental group and the control group in the post-test was 12.99. The mean score of the experimental group was 81.73, while that of the control group was 68.74. The mean score of the experimental group increased by 30.30 points, while the control group increased by 16.28 points.

Based on the calculation both of the post-test results in experimental group and control group, the researchers can conclude that the students' vocabulary mastery of the experimental group was higher or more significant than the control group. It means that the use of Hidden Object Game can develop students' vocabulary mastery. After getting the mean score of the pre-test and the post-test

of both groups, the researchers computed the deviation and square deviation in order to find out the difference of the students' scores between both groups in the pre-test and the post-test. Based on the calculation, the total deviation score of the experimental group was 1000, and the square deviation score of the experimental group was 35200. On the other hand, the total and square deviation scores of the control group were 537 and 12146. The result can be seen in table :

Table 3- Result of Deviation Score and Square Deviation

Group	Deviation Score	Square Deviation Score
Experimental	1000	35200
Control	537	12146

Then, the researchers computed the $t_{counted}$ to find out the significant difference in both experimental and control groups using the formula proposed by Arikunto (2013:355). Based on the computation, the t-counted value was 5.03. After that, to determine whether the hypothesis is accepted or rejected, the researchers counted the t-table by applying the degree of freedom (df) = Nx + Ny – 2 = 33 + 33 - 2 = 64 with a level of significance of 0.05. The researchers found that the t-table value was 1.99. Based on the results, the researchers concluded that the hypothesis of this research was accepted because the t-counted value (5.03) was higher than the t-table (1.99). In other words, the use of the Hidden Object Game can develop vocabulary mastery of the eighth grade students of SMPN 4 Palu.

DISCUSSION

In this research, the researchers applied hidden object game to the eighth grade students of SMP Negeri 4 Palu. In this section, the researchers would like to explain the research findings which are related to looking at the effect of the use of Hidden Object Game to develop students' vocabulary mastery. In conducting this research, the researchers gave pre-test at the first meeting and post-test at the last meeting for both experimental and control groups. The purpose was to know the students' knowledge in mastering vocabulary. There were 32 items of tests; 10 items of multiple choice, 5 items of scrambling test, 3 items of making sentences and 14 items of matching pictures. The result of the pre-test in the experimental group only 3 students passed and 30 students failed or there were 9% of students who gained scores above 70 (KKM). While in the control group, only 4 students passed and 29 students failed or there were 12% of students who gained scores above 70 (KKM). It indicates that for the pre-test, the number of students in the control group was more successful in achieving passing grade 70 (KKM) than the students in the experimental group.

After conducting the pre-test in both groups, the researchers conducted the treatment to the experimental group in six meetings. The researchers focused on students' vocabulary of noun (common noun and concrete noun). Both the experimental group and control group were taught the same teaching material, but in the control group was taught by the teacher strategy. The treatment that was applied in the experimental group is Hidden Object Game as a media that is appropriate for the junior high school students' level. The researchers taught the students to find the meaning of

words, how to spell the words, and how to use the word in the sentence. After several meetings, the students had already understood about noun. They also know how to make sentences by using that words.

After giving the treatment, the post-test is conducted. The purpose was to know the progress of students' vocabulary after the treatment. The result of post-test in the experimental group 28 students passed and only 5 students failed, while in the control group, only 10 students passed and 23 students failed. The result of the post-test indicated that students' scores increased. It can be seen in the experimental group 85% of the students got the score higher than the minimum standard score from the school. It was found that before the treatment was given, the mean score of pre-test was 51.43. Then, after the treatment was given, the mean score of post-test was 81.73. While the students in control group who got scores higher than 70 is only 30%. From the data analysis above, it indicates that for the post-test, the number of students in the experimental group was more successful in achieving passing grade 70 (KKM) than the students in the control group.

Based on the data analysis of this research, it showed that the students' vocabulary mastery who were taught by using Hidden Object Game was better than the students who were taught without using Hidden Object Game. It is supported by the data that the post-test score of students in the experimental group is higher than the control group. This is in line with Jassim (2019), who explains that games have positive impacts as a tool on learning vocabulary. Games provide an element of fun in the classroom and have a significant role in the learning process for young learners (Taghizadeh and Ravan, 2017).

From the results of this research, the researchers found that students who were taught through the Hidden Object Game obtained better development in vocabulary mastery. The researchers found that the problem faced by the students was minimized. Now, their vocabulary was better than before the treatment, and the students had already understood about common and concrete noun. They also know how to make a sentence using those words that they have learned. The researchers found some advantages after conducting the treatment by using Hidden Object Game. First, the students pay more attention and they can enjoy the lesson. Second, this game can motivate students to explore scenes or search for objects independently, in pairs, or in groups. Third, all students can actively participate in the learning process. Then, the students became more interested in memorizing and writing words. The students also showed their contribution when they found some words they did not know by asking their friends in the group or seeing the meaning of the word in the dictionary. This is a simple game that helps students remember groups of words. This Game helps students to remember words based on illustrative pictures or objects that students have been looking for before. This finding is in accordance with the findings of Sari (2017) which showed positive results in the effect of Hidden Object Media, where there is an increase in student attention and provides more interaction during learning activities.

Through pictures in this game, the students got the chance to know new words and know the visual form of words that they get. The pictures of the game make them understand better and

keep the new words stay longer in their minds. This helps expand their vocabulary and introduces them to words they may not encounter in daily language. In other words, it helped the students not easily forget the new words they had learned. Pictures can indeed be beneficial visual stimuli for the teaching learning process (Carolina, 2019). Pictures have the ability to convey meaning and leave a lasting impression and making them memorable (Bates and Son, 2020). Visual elements like illustrate pictures in this hidden object game can make it easier for students to remember and recall the words they have seen. The activity of matching the words with the appropriate objects might stimulate the students' own memory.

The discussion above highlights previous studies that support the effectiveness of using Hidden Object Games to develop vocabulary mastery of the students. The first study, by Mirta, Suryani, and Nuraeningsih (2021), the research result shows that there is a significant difference between english vocabulary mastery in the pre-test and post-test before being taught by using hidden words game application. The second study, by Simamora, Bunau and Arifin (2013), the data analysis indicated that the use of Hidden Object media improved the students' vocabulary mastery. The same results from the study of Hong, Shen, Chin and Chen (2022), also state that students who were taught vocabulary with the Hidden Object Game achieved a significant influence on vocabulary mastery. This proved that the use of hidden object game can develop students' vocabulary mastery. Thus, the researchers conclude that Hidden Object Game can be used as an appropriate and good way to teach vocabulary.

CONCLUSION

Based on the data analysis of this research, the researchers conclude that the use of Hidden Object Game develop students' vocabulary of eighth grade students at SMPN 4 Palu. There is significant progress of the students' ability in developing vocabulary after receiving treatment. The result shows that the $t_{counted}$ (5.03) is higher than the t_{table} (1.99). It means that the research hypothesis is accepted. In conclusion, the use of Hidden Object Game can develop students' vocabulary mastery at SMPN 4 Palu.

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