TEACHING VOCABULARY BY USING HIDDEN MYSTERIES GAME

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Abstrak: Peneliti mencoba untuk mengetahui apakah pengajaran kosakata melalui permainan *Hidden Mystery* dapat meningkatkan kemampuan penguasaan kosakata siswa. Selajutnya, penelitian ini dirancang dalam bentuk pre-eksperimental. Data penelitian diperoleh dari nilai pre-tes dan post-test. Analisis data menunjukan bahwa nilai rata-rata siswa dalam pre-test adalah 55,48 (dibawah nilai KKM yaitu 65). Sedangkan nilai rata-rata siswa dalam post-test adalah 70 (diatas nilai KKM yaitu 65. Nilai perbandingan antara post-test dan pre-test adalah 14,52. Hal ini menunjukan bahwa pengajaran kosakata dengan menggunakan permainan Hidden Mystery dapat meningkatkan kemampuan penguasaan kosakata pada siswa.
Keyword: Kosakata, Permainan *Hidden Mystery*

Abstract: The researcher tried to find whether teaching vocabulary mastery through Hidden Mysteries Game can improve students' vocabulary mastery. Furthermore, this research was designed in the form of pre-experimental research. The data of this research were obtained by doing Pretest and Post-test assessment. The data analysis indicated that the mean score of the students' pre-test was 55.48 (below passing grade 65.00) while the mean score of the students' post-test was 70 (above passing grade 65.00). The interval score of post-test and pre-test was 14.52. It means that teaching Vocabulary by using Hidden Mysteries Game can improve the students' reading skill, especially vocabulary mastery.
Keyword: Vocabulary Mastery, Hidden Mysteries Game

In SMPN 18 Pontianak, students had three problems in vocabulary mastery. The problems were: first, they dislike memorizing the vocabulary by reading only from the text books. Second, they had no interest in topics of the material in English subject given by the teacher. Third, they rarely practiced English especially practicing material which dealing with vocabulary mastery.

The more extensive vocabulary mastery of students will bring an impact of discourse understanding and enhancement of students reading skill**.** Reading activities could not run properly without the mastery of vocabulary. Having a lot of vocabularies determines reading comprehension skill.

The acquisition of vocabulary is one of the most critical components of successful language learning so that the teacher need to repeat vocabulary more often, because students must work with a word or phrase many times

before acquisition take place, and offer variety to keep the exercises fresh and to cater to different learning styles (McCarten 2007:26).

One of the teaching media could be used to improve their vocabulary mastery is Hidden Mysteries game. Hidden Mysteries game is very important in teaching vocabulary mastery, because it gives students an opportunity to learn, enrich, and foster the students to find new vocabulary by themselves in the class and outside the class. In addition, in Hidden Mysteries game has dynamic, interactive and visual features that cannot be provided by printed materials. In this game students are supposed to find out the vocabulary provided in the game screen. To help the students easier to find out the vocabulary, the game also provide attractive picture about the vocabulary in the game screen, so the students just match the vocabulary with the correct picture.

When the students first start the game, the students were asked if the students want to play the game in Timed Mode or Relaxed mode. If the students want to play without the pressures of having a timer they just choose the Relaxed Mode. If the students like the challenge of playing against the clock they just choose Timed Mode. In the Timed Mode the students will get penalized 30 seconds off theirs clock for random clicking. In Relaxed Mode the students can click on the screen as much as they want without any penalties. In this case, this game will make the students interest to learn vocabulary more intensive, because they could learn the vocabulary while playing the game.

For these reasons, the researcher was interested to investigate teaching Vocabulary by using Hidden Mysteries Game to Improve Vocabulary Mastery of Second Semester of seventh Grade Students of SMPN 18 Pontianak. The researcher also wanted to know whether Hidden Mysteries Game can increase student's ability in vocabulary.

In language teaching, games have often been used to stimulate motivation and authentic communicative practices, as games have been conceptualized as the "the fun factor" of language learning (Warschauer and Healey 1998, 60) cited in Sorenson and Meyer (2007: 561). In informal settings, games have often been associated with the leisure activities of children as gaming is a central activity in children's off school practices with languages. In this context, languages (specifically English) have often had to be learned and used by children in order to engage and participate in games (Sorenson and Meyer 2007, 561).

Therefore, the researcher was interested to investigate teaching Vocabulary by using Hidden Mysteries Game to Improve Vocabulary Mastery of Second Semester of seventh Grade Students of SMPN 18 Pontianak. The researcher also wanted to know whether Hidden Mysteries Game can increase student's ability in vocabulary.

METHOD

In accordance with the problem, the appropriate research method used in this research was the-pre experimental study. The design of this research is

one group pre-test post-test design. The form of one group pre-test post-test design can be presented in table 1 below which was adapted from Cohen (2000: 213):

Table 1. the form of one group pre-test-post-test

Pre-test	Treatment	Post-test
X1	T	X2

Population is any set of people or events from which the sample is selected and to which the study results will generalize. The population of this research was all of seventh grade of Junior High School students in SMPN 18 Pontianak Class A,B,C,D,E and F.

Sample is a group of people or events drawn from a population. The sample of the present research involved 40 students class E of seventh grade of junior high school student in SMPN 18 Pontianak were investigated in deep.

In this research the researcher used measurement technique to measure students' vocabulary improvement through Hidden Mysteries Game. The data was collected by administrating the test twice. First, to collect the data before the treatment held, to see students pre-condition before experiment. Second is post-test to collect the data after experimental treatment given.

Tool of data collecting in this research is: Test item. The test items are: Multiple Choice and Matching. Multiple Choice is easy to mark but quite difficult to design. The part of vocabulary which was focused by the researcher was preposition and noun.

The researcher analysed the data statistically in several steps as described below:

The formula to analyse students' individual score of pre-test and post-test

$$X = \frac{students' \ score}{max \ score} \times 100$$

The formula below is to analyse students' mean score of pre-test and post-test.

$$\underline{X}_1 = \frac{\sum X_1}{N} \qquad \underline{X}_2 = \frac{\sum X_2}{N}$$

Where:

$\underline{X}_1$ = mean score of pre-test
$\underline{X}_2$ = mean score of post-test
$\sum x_1$ = sum of pre-test individual score
$\sum x_2$ = sum of post-test individual score
N = number of students

To analyze the different score of pre-test and post-test, the researcher use formula below.

$$Md = \underline{X}_2 - \underline{X}_1$$

Where:

Md = mean score of post-test – pre-test
X_1 = mean score of pre-test
X_2 = mean score of post test

To analyse the students' significance score of pre-test and post-test. It will be computed by using t (test) formula (Arikunto,2002:275):

$$t = \frac{Md}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}}$$

Where:

d2 = the gain score of post-test and pre-test

N = number of students

The purpose of analysis on the effect of the treatment (Effect Size) is to know the effect size of the treatment, the researcher used formula below to calculate the Effect Size of the pre-test and post test result.

$$ES = \frac{X_e - X_c}{S_d} \qquad S_c^2 = \frac{\sum X_1 - X_1)^2}{N}$$

$$S_d = \sqrt{\frac{(N_e - 1)S_e^2 + (N_c - 1)S_c^2}{N_e + N_c - 2}} \qquad S_e^2 = \frac{\sum (X_2 - X_2)^2}{N}$$

Where:

ES = Effect Size

X_c= mean of pre-test

X_e= mean of post-test

S_d= Standard deviation

S_c = Standard deviation of pre-test

S_e = Standard deviation of post-test

N = Total Number of students

To determine whether the effect size is strong or weak, Cohen (2000: 139) suggest the following categorization:

Table 2. Effect Size Categorization

Range	Qualification
0 – 0.20	Weak effect
0.21 – 0.50	Modest effect
0.51- 1.00	Moderate effect
>1.00	Strong effect

FINDING AND DISCUSSION

Findings

a. The analysis of Pre-test result of the students

The data of the pre-test scores can be seen in the table below.

Table 3. Pre-test Result

NO	STUDENT	PREPOSITION Max score (50)	NOUN Max Score (50)	SCORE (PREPOSITION +NOUN)
1	s1	30	40	70
2	s2	30	30	60
3	s3	30	20	50
4	s4	20	30	50

5	s5	20	20	40
6	s6	40	20	60
7	s7	20	20	40
8	s8	30	10	40
9	s9	40	20	60
10	s10	30	30	60
11	s11	30	20	50
12	s12	20	20	40
13	s13	40	20	60
14	s14	30	20	50
15	s15	30	30	60
16	s16	40	30	70
17	s17	30	20	50
18	s18	30	30	60
19	s19	20	20	40
20	s20	40	20	60
21	s21	40	30	70
22	s22	30	30	80
23	s23	40	20	60
24	s24	30	20	50
25	s25	30	20	50
26	s26	20	20	40
27	s27	30	30	60
28	s28	30	30	60
29	s29	30	20	50
30	s30	40	30	70
31	s31	40	20	60
Total				1720
Min				40
Max				80
Average				55,48

After the data was analysed, it showed that the highest score was 80 and the lowest score was 40.

b. The Analysis of Post-test Result of the Students

The data of the post-test score can be seen in the table below:

Table 4. Post-Test Result

NO	STUDENT	PREPOSITION Max score (50)	NOUN Max Score (50)	SCORE (PREPOSITION +NOUN)
1	s1	50	40	90
2	s2	40	40	80
3	s3	40	20	60

4	s4	30	30	60
5	s5	30	20	50
6	s6	40	40	80
7	s7	40	20	60
8	s8	30	20	50
9	s9	50	30	80
10	s10	40	40	80
11	s11	40	20	60
12	s12	30	20	50
13	s13	50	30	80
14	s14	40	30	70
15	s15	50	30	80
16	s16	40	40	80
17	s17	40	30	70
18	s18	30	40	70
19	s19	50	20	70
20	s20	40	30	70
21	s21	40	30	70
22	s22	50	40	90
23	s23	50	20	70
24	s24	30	30	60
25	s25	40	30	70
26	s26	30	20	50
27	s27	40	30	70
28	s28	40	30	70
29	s29	40	30	70
30	s30	50	30	80
31	s31	50	30	80
Total				2170
Min				50
Max				90
Average				70

After the data was analysed, it showed that the highest score was 90 and the lowest score was 70.

c. The comparison of the test result

Table 5. Pre-test and Post-test Comparison

NO	STUDENT	X_1	X_2	$D=X_2-X_1$	D^2
1	s1	70	90	20	400
2	s2	60	80	20	400
3	s3	50	60	10	100
4	s4	50	60	10	100

5	s5	40	50	10	100
6	s6	60	80	20	400
7	s7	40	60	20	400
8	s8	40	50	10	100
9	s9	60	80	20	400
10	s10	60	80	20	400
11	s11	50	60	10	100
12	s12	40	50	10	100
13	s13	60	80	20	400
14	s14	50	70	20	400
15	s15	60	80	20	400
16	s16	70	80	10	100
17	s17	50	70	20	400
18	s18	60	70	10	100
19	s19	40	70	30	900
20	s20	60	70	10	100
21	s21	70	70	0	0
22	s22	80	90	10	100
23	s23	60	70	10	100
24	s24	50	60	10	100
25	s25	50	70	20	400
26	s26	40	50	10	100
27	s27	60	70	10	100
28	s28	60	70	10	100
29	s29	50	70	20	400
30	s30	70	80	10	100
31	s31	60	80	20	400
	N =31	∑X1= 1720	∑X2= 2170	∑D= 450	∑D2=7700

The researcher provided the formula below to calculate the students' mean score of pre-test and post-test.

$$M_1 = \frac{\sum X_1}{N} \qquad M_2 = \frac{\sum X_2}{N}$$

$$M_1 = \frac{1720}{31} \qquad M_2 = \frac{2170}{31}$$

$$M_1 = 55.48 \qquad M_2 = 70$$

The next is the formulation to analyse the students' different score of pre-test and post-test as seen below.

$$MD = M_2 - M_1$$
$$MD = 70 - 55{,}48$$

$MD = 14.52$

The next formulation was purposed to find out the significant of the students' score as seen below

$$t = \frac{MD}{\sqrt{\frac{\sum X2xd}{N(N-1)}}} \qquad \sum X^d = \sum d^2 - \frac{(\sum d)^2}{N}$$

$$t = \frac{14.52}{\sqrt{\frac{217OX450}{31(31-1)}}} \qquad \sum X^d = 7700 - \frac{(450)^2}{31}$$

$$t = \frac{14.52}{\sqrt{\frac{976500}{930}}} \qquad \sum X^d = 7700 – 6532.26$$

$$t = \frac{14.52}{\sqrt{1050}} \qquad \sum X^d = 1167.74$$

$$t = \frac{14.52}{32.40}$$

$$t = 0.45$$

The last is the formulation of the effect size analysis

$$ES = t\sqrt{\frac{1}{N}}$$

$$ES = 0.45\sqrt{\frac{1}{31}}$$

$$ES = 0.45\sqrt{0.0322}$$

ES = 0.45 x 0.17

ES = 0.0765

The result is categorized as moderate.

Pre-test<Compare>Post-test

1629<324>1950

The lowest score of pre-test was 40 and the highest score was 80. Whereas the lowest score of post-test was 50 and the highest score was 90. It means that using Hidden Mysteries Game can increase their vocabulary mastery. The display of pre-test and post-test score can be seen below on Diagram 1 and diagram 2

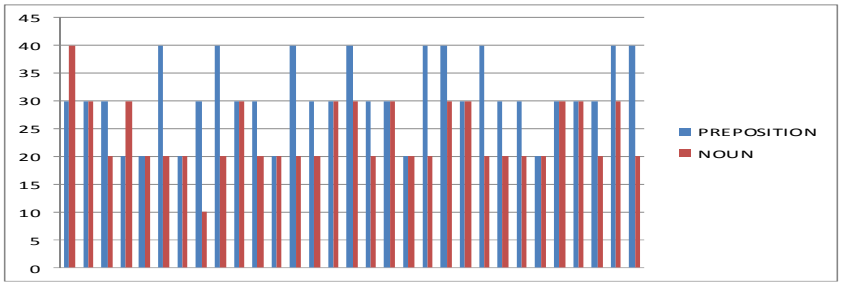

Diagram 1.Pretest Scor

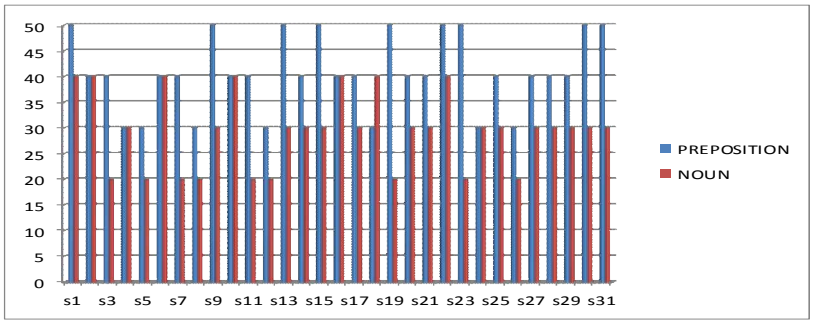

Diagram 2.Posttest Score

In diagram 3 below, the researcher wanted to explain about comparing between pre-test and post-test based on the students' mean score. From that table we know that after using the treatment, the score of post-test became high until**70.**

The result of analysing the data by using above formula shows that the coefficient is **0.0765**. It is categorized as moderate. It means that there was a significance increase after Hidden Mysteries Game was used to teach vocabulary mastery.

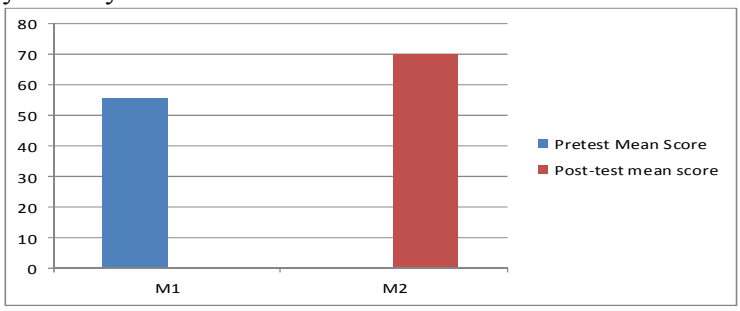

Diagram 3.The Comparison between Pre-test and Post-test

Discussion

Hidden mysteries game is a game that designed to help students to improve their vocabulary mastery. In this game, the students were guided to master 20 vocabularies in 20 minutes. The display of the first level the game showed twenty vocabularies and attractive pictures. Then, the students were expected to match correct vocabularies with the pictures. Since this research focused on seventh grade students of Junior High School, the students were focused to learn noun and preposition based on the curriculum. There are examples of the vocabularies taught in the game; they are Dentures, TV Remote, Circuit board, Dinosaur, Binoculars , Tambourine, Microscope, Dog Bone, Hair Brush…(noun). This first level is designed to make the students to feel enjoy, because they could learn while playing a game.

To drill the student to think faster, this game provided time mode and relaxed mode. If the students want to play without the pressures of having a timer they just choose the Relaxed Mode. If the students like the challenge of

playing against the clock they just choose Timed Mode. In the Timed Mode students will get penalized 30 seconds off theirs clock for random clicking. In Relaxed Mode students can click on the screen as much as you want without any penalties.

In the second level, after the student mastered about noun, the game showed the list of prepositions; students should not only know the nouns provided, but also recognize the positions of the noun or what we called prepositions. For example : The bronze feature is above the gold statue, The frog is beside the swimming full, Beside the clock, Near the bottle, Next to the ball, Under the fence, Under the gold statue near to the pot, Near to the guitar, On the hand of gold statue, The card is in front of fish picture.

This second level also provide time mode. If the students wanted to play the game without any pressure, they can choose relaxed mode. In this relaxed mode, they can take a long time to finish the mission. That was how the game designed to help the students to improve their vocabulary mastery which more challenge, attractive and unique. It was because the students are more familiar with digital games like Hidden Mysteries game rather than memorizing the vocabularies from the textbook. The researcher proved that the Hidden Mysteries game can improve students' vocabulary mastery by doing a research in SMP 18 Pontianak from the pretest trough the posttest. The next paragraph discussed how the procedure in doing the research.

Based on the procedure that had been passed in teaching vocabulary through Hidden Mysteries Game, the researcher concluded the result of students' activities in a scoring table. From the table 3 of Pre-test, after the writer gave them pre-test, the average of the student's score is 55.8 which were below the passing grade 65 (*KKM*).

After using Hidden Mysteries Game, the writer can see the different of pre-test and post-test. From the table 4 of post-test the writer could compare the result with table 3 pre-test. The average score of the students is 70 which was above the passing grade 65 (*KKM*).

From the data analysis, it was found that before the treatment given, the mean score of pre-test was 55.48, then, after the treatment was given, the mean score of post-test was 70. The result of the interval score was 14.52. It means that the use of Hidden Mysteries Game is effective to improve students' vocabulary mastery. It means that Alternative hypothesis was accepted. We could see the table diagram 1, 2 and 3 above. The researcher based on accepted Alternative hypothesis concluded that Hidden Mysteries Game is effective to improve vocabulary mastery of second semester of seventh grade students of SMPN 18 Pontianak in academic year 2012-2013.

Based on the research done by the researcher, there were several advantages of Hidden Mysteries Game when the researcher conducted this research. First of all, this game can be useful for students in real situation. In this game the students learn more effective because in this game support by unique pictures.

Secondly, this game could develop the students' creativity. At the same time the Hidden Mysteries Game gave the opportunity to the students to be more active and creative to find the new thing in playing the game.

Thirdly, this game could enrich the students' knowledge, attitude and skill in social problem. Based on the researcher experienced, in this game the students were demanded to be more diligent to develop all of the weaknesses that students have, such as less of vocabulary. So in this game the students must enrich their vocabulary in order to be easier to express what they want to talk about.

CONCLUSION AND SUGGESTION

Conclusion, the alternative hypothesis of this research was accepted because the coefficient of the student score is 0.0765. It means that the Hidden Mysteries Games was effective to improve vocabulary mastery of second semester of seventh grade students of SMPN 18 Pontianak in academic year 2012-2013. From the result of the analysis, it is proven that the students' score of vocabulary by using Hidden Mysteries Game is better. This result has answered the research question that the use of Hidden Mysteries Game in teaching vocabulary is effective.

Suggestion, the success in teaching doesn't only depend on the lesson program, but more important is thing is that the way the teacher present lesson and the media used to easy the student to grasp the lesson well. The teachers are suggested to use Hidden Mysteries Game in the teaching learning process as one the media to develop the students' vocabulary mastery as well as to create a good atmosphere in teaching learning process.

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