



Increasing Students' Verb Mastery Through "Puzzle" Game to the Second Grade Students' at SMA Negeri 4 Halmahera Utara

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Abstract

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This study aims at increasing students' verb mastery through "puzzle" game to the second grade at SMA Negeri 4 Halmahera Utara. This research is a quantitative research. The researchers used quantitative research with quasi-experimental design. The populations of this study were 26 students in class XI IPS-1 and 24 students in class XI IPS-2, and the sample taken using random sampling. So the overall samples were 28 students consisted of 18 students in the experimental class and 10 students in the control class. The data collection technique includes pretest, treatment, and post test. The findings of the study showed that most of the students' mastery mastery increased after applying puzzle games in the teaching and learning process. The results of the experimental class analysis showed that the mean pre-test score was 62.5 and the post-test mean score was 72.7 while the control showed that the pre-test mean score was 63.00 and the post-test mean score was 66.00. This indicates that the experimental class experienced increased in verb mastery and hypothesis testing showed that the experimental students' scores were significantly higher than the control class. It can be seen that the t-test value of 0.163 is higher than 0.05 ($0.163 < 0.05$). In addition, the application of puzzle games helps students' ability to memorize and understand new verbs easily.

Keywords: Verbs, Puzzle, Game

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INTRODUCTION

In human civilization, language is the most important communication tool that unites individuals with one another. From language, a person can absorb information and interact with other people. Meanwhile, learning English especially requires a verb in every English sentence it will make it easier for us to interact with anyone or the other persons. The verb is the heart of a sentence.

Verbs are a class of words that usually function as predicates, in some other languages verbs have morphological characteristics, such as characteristics of tense, aspect, person, or number (Kridalaksana, 2011:254). So, the existence of a verb is important, because without a verb, a complete English sentence will not be formed. However, in practicing, most of the novice English learners often ignore the existence of verbs in their English sentences, even though many of them understand the importance of having verbs.



According to Finoza (2004:65-66) verbs are words that express actions or actions, processes, and circumstances that are not properties. Verbs generally function as predicates in sentences.

Verbs are the smallest elements in language, a collection or combination of words will become phrases, clauses, and sentences. The use of verbs is very important in a unified sentence. To improve students' ability in English verbs, teachers should think about how to make students to master English verbs for their own purposes. There are so many approaches, methods, and techniques that can be used by teachers.

Learning achievement is the result of educational evaluation achieved by students after undergoing a formal education process within a certain period of time and the learning outcomes are numbers (Suryabrata, 2006: 6).

One technique that can be used to improve students' ability in English is games. Through games, there are many advantages for students in the learning process.

Santrock (2007: 216-217) the game is a fun activity that is done for fun. Games are activities that are done for fun and have rules. Students can be more motivated and challenged. Games provide language practice in various speaking, listening, writing, and reading skills. Games also encourage students to interact and communicate effectively.

Darmansyah (2010: 11) learning will be effective if the learning process is carried out in a pleasant atmosphere (joyful learning). Game is an activity in the context of a game that is usually played by individuals or groups who interact with each other by using certain rules and also certain goals, usually in a non-serious context with the aim of refreshing.

The use of games in learning can be used as a solution to increase students' ability of verbs so that learning objectives are achieved. Therefore, a research was conducted on increasing students' mastery of verbs through puzzle games.

According to Yudha (2007: 33), a puzzle is an image that is divided into pieces with the aim of sharpening thinking power, practicing patience, and getting used to sharing skills. Puzzle game are games in the form of a series of squares or equilateral squares. Puzzle games are learning media of a kind of game that is divided into horizontal and descending categories by filling in the empty boxes.

According to Nisak (2011: 110), this puzzle game has the following objectives: a) to form a cooperative spirit in the participants, b) participants can be more consistent with what is being done. c) Train participants' logical mathematical intelligence. d) Foster a sense of solidarity among students. e) Foster a sense of kinship between students. f) Train strategies in cooperation between students. g) Foster mutual respect and appreciation among students. h) Foster a sense of belonging among students. i) Entertaining students in class. The puzzle learning media can increase students' memory, language intelligence, and develop thinking skills, especially in students' knowledge.

When making a puzzle game, assign a keyword related to the subject matter (Silberman, 2013: 257). In addition, variations in how to answer can be given, for example by writing questions on a card that each student takes turns reading and exchanging it with another friend after answering.

This study uses games to examine students' verb mastery through games because games have been proven to have advantages and effectiveness in learning verb mastery in various ways. Therefore, the role of games in teaching and learning verbs cannot be denied. However, to achieve the most important of the verb games in English, it is important to choose the appropriate game.

RESEARCH METHOD

Research Design

This research is an experimental with a quasi method experimental or quasi experimental. Called a quasi-experimental, because the selection of sample subjects was done randomly, where after obtained a group of subjects as a sample assigned randomly to divide the sample into two groups, namely the experimental and control groups. Research design or design the experiment used was a control group pre-/post-test design. Arikunto (2006:79) describes the control group design before/after the test as follows:

Table 1. Control Group Pre-test Post-test Design

Group	Pre-test	Treatment	Post-test
E	T1	X1	T2
C	T2	X2	T2

Information:

- E : Group Experiment
- C : Group Control
- X1 : Treatment In Class Experiment
- X2 : Treatment In Class Control
- T1 : Pre-test
- T2 : Post-test

Population

The population is a generalization area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2011: 80). The populations in this study were all classes of second grade students at SMA Negeri 4 Halmahera Utara, academic year 2021/2022, as many as 5 classes with the number of 111 students is presented in table 3.1 with the following details:

Table 2. Research population

NO	Class	Totally
1.	XI IPA 1	24 Students
2.	XI IPA 2	27 Students
3.	XI IPS 1	26 Students
4.	XI IPS 2	24 Students
5.	LANGUAGE	10 Students
Totally		111 Students

Sample

The sampling technique used this study is a random sampling technique. Random sampling is a type of probability sampling in which everyone in the target population has an equal chance of choosing.

The samples were class XI IPS 1 and IPS 2 which had been randomized so that the experimental class consisted of 18 people while the control class consisted of only 10 people.

Instrument of the Research

The research instrument used in this study was a test. Sugiyono (2014:92) states that "The research instrument is a data collection tool used to measure the observed natural and social phenomena". Thus, the use of research instrument is to find complete information about a problem, natural or social phenomenon.

Data Collection Techniques

In this study, the researchers look for research variables using data collection techniques. Data collection techniques are used among others through pretest, treatment, and posttest.

1. Pre Test

Pre-test a form of a question, which is posed by the teacher to his students before starting a lesson question. The question asked is the material that will be taught that day (new material).

2. Treatment

The teaching and learning process was carried out according to the learning scenario and learning syllabus that has been made. The research uses the puzzle game method to improve students' verb skills.

3. PostTest

Pro test is a form of question given after the lesson/material has been delivered. In short, the post test is the final evaluation when the material taught on that day has been given in which a teacher gives a pro test with the intention of whether students have understood and understood the material that was just given that day.

Data Analysis Techniques

In this study, after the data from the pretest and posttest were obtained, then the data processing and analysis techniques were carried out using the SPSS 16.

1. Normality Test

Parametric statistics work based on the assumption that the data for each variable which will be analyzed is normally distributed.

2. Homogeneity Test

Homogeneity test is used to determine whether the variance is uniform or not samples taken from the same population.

3. Final Analysis (Hypothesis Testing)

Research hypotheses need to be tested for truth. In this study the statistical technique used to test the hypothesis is the t-test.

FINDING AND DISCUSSION

Research Finding

The implementation of this quasi-experimental research involved 2 groups, namely the experimental group and the control group. The experimental group using the puzzle method totaled 18 students and the control group using the lecture method amounted to 10 people. Activities carried out the planning stage of this research are preparing a syllabus, Learning Implementation Plan (RPP), making assessment guidelines, preparing material that is in accordance with the competencies to be taught and making learning media in the form of puzzle. Research conducted three meeting, both experimental class and control class. The post-test questions were given at the third meeting.

1. Score from the experimental class pretest and posttest

The experimental class of this class is taken from class XI with a total of 18 students, which has been obtained from random sampling. The pretest and posttest score for experimental class:

Table 3. Pretest and Posttest Value for Experiment Class

No	Name	Value	
		Pretest	Posttest
1.	FAT	55	65
2.	RAB	55	80
3.	FKK	40	55
4.	LLP	55	90
5.	VFR	95	100
6.	NJ	45	60
7.	FK	45	65
8.	GL	90	100
9.	FP	95	100
10.	MB	95	100
11.	RK	90	100
12.	MFN	60	60
13.	RD	30	55
14.	SSI	40	30
15.	SAH	65	40
16.	DAP	40	55
17.	NUT	65	65
18.	CP	65	90
Totally		1.125	1.310
Average		62,5	72,7

In the pretest the highest value is 95, the lowest value is 30, the total value of 1.125 and the average value is 62, 5. In the posttest the highest value is 100, the value of the lowest is 30, the total value is 1.310 and the average value is 72,7. From the value above there are students who pass and do not pass the KKM where the KKM in English subjects is 75.

2. Value from the pretest and posttest results for the control class

The experimental class of this class is taken from class XI with a total of 10 students, which has been obtained from random sampling. The following is the pretest and posttest value for control class:

Table 4. Pretest and Posttest Value for Control Class

No	Name	Value	
		Pretest	Posttest
1.	HS	90	80
2.	SH	50	45
3.	AFSA	70	80
4.	ALK	90	75
5.	GR	50	55
6.	FG	35	55
7.	FS	55	55
8.	RI	55	70
9.	AN	95	80
10.	MMM	40	65
	Totally	630	660
	Average	63	66

In the pretest the highest value is 95, the lowest value is 35, the total value of 630 and the average score is 63. In the posttest the highest value is 80, the value of the lowest is 45, the total value is 660 and the average value is 66. From the value above there are students who pass and do not pass the KKM where the KKM in English subjects is 75.

Learning Outcomes of English before Treatment (Initial)

1. Pretest Normality Test

Normality test is used to determine whether the sample taken come from a normally distributed population. Normality test results can be seen in the Tests of Normality table after processing with SPSS 16.0 for windows. Test Normality used is the normality test using the Kolmogorov-Smirnov method. The results of the normality test data processing can be seen in Table 5

Table 5. The Normality Test Results of the Pre-test Experimental Class and Control Class

	Kolmogorov-Smirnov	Df	Sig
Experimental class	0.749	18	0.629
Control class	0.767	10	0.598

Based on Table 4.3, it can be seen the significance value of the pretest learning outcomes the experimental class was 0.629 and the control class was 0.598. Both of them show a significance value of more than 0.05 which means H_0 is accepted. Based on the test results, it can be concluded that the two data the group is normally distributed.

2. Homogeneity Pretest

Homogeneity test is used to see if the variance comes from population is the same or not. Homogeneity test in this study was using Levene's method. The data is said to be homogeneous if the significance value is more than 0.05, while the data is said to be inhomogeneous if the significance value is less than 0.05. The results of the homogeneity test data can be seen in Table 4.4

Table 6. Result of Homogeneity of Pretest Experimental Class and Control Class

F	df1	df2	Sig-
.035	1	26	0.853

Based on Table 4.4, the significance value of the pretest learning outcomes was obtained in the experimental class and control class is 0.035 (more than 0.05) which means accepting H_0 , so it can be concluded that both groups come from a population with the same variance (homogeneous).

3. The Comparison Test of Experimental class and Control class

The results can be seen in Table 7

Table 7. One samples T-Test Pretest Experimental class and Control class

Resource	Statistic	Df	Sig	Result
Experimental class	-487	17	0.632	Improve
Control class	-289	9	0.779	Improve

Based on Table 7, the significance value of the pretest learning outcomes obtained by the experimental class students is 0.632 and the control class is 0.779 which means it is greater than 0.050 ($0.632 > 0.050$) and ($0.779 > 0.050$). This means that in the initial conditions (before treatment) the two sample groups have a balanced ability to master verbs.

English Learning Outcomes after Treatment (Final).

1. Posttest Normality Test

Normality test is used to determine whether the sample taken come from a normally distributed population. Normality test results can be seen in the Tests of

Normality table after processing with SPSS 16.0 for windows. Test Normality used is the normality test using the Kolmogorov-Smirnov method. The results of normality test data processing can be seen in Table 8

Table 8. Posttest Normality Test Results for Control Class and Experiment Class

	Kolmogorov-Smirnov	Df	Sig
Experimental class	0.806	18	0.534
Control class	0.644	10	0.801

Based on Table 8, it can be seen the significance value of the pretest learning outcomes the experimental class was 0.534 and the control class was 0.801. Both of them shows a significance value of more than 0.05 which means H_0 is accepted. Based on the test results, it can be concluded that the two data the group is normally distributed.

2. Posttest Homogeneity Test

Homogeneity test is used to see if the variance comes from population is the same or not. Homogeneity test in this study using Levene's method. The data is said to be homogeneous if the significance value is more than 0.05, while the data is said to be inhomogeneous if the significance value is less than 0.05. The results of the homogeneity test data can be seen in Table 9 below:

Table 9. Results of the Posttest Homogeneity Test for the Experimental Class and the Control class

F	df	df2	Sig-
	1		
6.508	1	26	.017

Based on Table 9, the significance value of the posttest learning outcomes was obtained in the experimental class and control class is 0.017 (more than 0.05) which means means accepting H_0 , so it can be concluded that both groups come from from a population with the same variance (homogeneous).

3. The Comparison of Experimental class and Control class

Independent Sample T-test was used to compare the mean of two groups from two different samples. The test statistics are used is t test. However, before the t-test was carried out, the normality test was carried out population as a prerequisite test and population variance homogeneity test for determine the t test to be used. Hypothesis testing using comparative test of two samples, namely the Independent Sample T-test with a level of 0.05 significance. If the significance is more than 0.05, it means that both classes have balanced average. The results of the mean difference test data can be seen in Table 10

Table 10. One samples t-test posttest control class and experimental class

Resource	Statistic	Df	Sig	Result
Experimental class	1.458	17	0.163	Improve
control class	0.246	9	0.811	Improve

Based on Table 10. The significance value of the posttest results obtained by the experimental class student learning outcomes is 0.163 and the control class is 0.811 which means it is smaller than 0.050 ($0.163 < 0.050$) and ($0.811 < 0.050$). This means that in the final (after being given treatment) both sample groups have the ability to improve English.

DISCUSSION

The differences in the ability of the experimental class are to master the verb using the crossword game method and the control class using the conventional method.

The result discusses the test and the effectiveness of using the crossword puzzle game method in teaching verb learning. The crossword puzzle game is an effective learning technique in the teaching and learning process. This is evident from the results of experimental research which shows that there is a significant difference in verb mastery between students using the crossword game method and those taught without the crossword game technique in class XI IPS SMA Negeri 4 Halmahera Utara. The crossword puzzle game method can improve students' mastery of verbs in the learning process and make students interested in the teaching and learning process because they can achieve their learning goals. This is evidenced by the significance value of the experimental class pretest of 0.632 (more than 0.05) and the control class of 0.779 (more than 0.050). The next step is the implementation of learning for 6 meetings in each class. Learning in the experimental class was given treatment, namely controlling verbs through puzzle games, while controls were not given puzzle game treatment. After the learning process, then all samples in each sample group were given a test to measure the effect on learning outcomes there were differences in treatment in the learning process.

The analysis of the difference test of the average student learning outcomes of the experimental class and the control class showed a significance value of 0.005 which means it is smaller than 0.05. This means that the two sample groups have a significant mean difference and because the average student learning outcomes in the experimental class (72.7) are higher than the control class (66), it can be said that there are significant differences in learning outcomes, giving after treatment with mastery of verbs through puzzles on learning outcomes in the experimental class.

Based on the problem formulation, research objectives, the results of the data analysis that have been presented, it can be said that the increase in students' vocabulary in English subjects using puzzles game is better than students who do not use puzzles. This is indicated by the acquisition of the average N-Gain value of the experimental class is 0.497474 belonging to the medium category and for

the N-Gain class is 0.126442 belonging to the low category. In other words, the use of puzzles has a positive effect on increasing students' vocabulary in English subjects.

Through mastery of verbs through puzzles in English subjects, students can understand English as something real or real because more than that how to learn English without getting bored by using English games so that it can help students to understand words. English but works not only as an abstract concept of English as something real in everyday life. From this research, it can be said that there are differences in the average learning outcomes in learning verb mastery in crossword puzzle games before and before being given treatment.

CONCLUSION & SUGGESTION

Conclusion

Based on data analysis, research hypotheses test and discussion has been carried out, the following conclusions can be seen below:

1. There are differences in learning achievement in mastering English verbs students of class XI SMA Negeri 4 Halmahera Utara between those who taught by using the puzzles game and being taught using conventional method. It can be seen from the results the end of the average pre-test of the experimental class which is 62.50 with a mean of post-test experimental class of 72, 70. In addition, the average post-test class experiment which is also higher than the post-test mean of the control class, namely 66,00 shows that there are differences in the ability to master English verbs for the experimental class that received treatment with the class untreated control. In addition, the t-test value is 0.163 compared to the significance value = 0.05 so that teaching through puzzle game can improve students' vocabulary.
2. The use of puzzles in learning English verbs for class XI students of SMA Negeri 4 Halmahera Utara is more effective than the use of conventional method.

Suggestion

From the results of the research that has been carried out, the effort to improve students learning achievement, especially for mastery of English verbs, there are suggestions as follows:

1. For schools, it is hoped that this media can be used as a reference in variations in the use of learning media. The use of the right media can make it easier for teachers to convey material, and students will also find it easier to understand teaching materials, so as to improve student learning achievement.
2. Teachers are expected to be more critical and selective in using appropriate media creative, innovative and effective in the learning process, not only using conventional media. Furthermore, the teacher is expected to be able to apply the puzzle game media in learning vocabulary, especially German. It will be more interesting if this game media is combined with pictures, media, and other learning techniques.
3. Students are expected to be more cooperative, independent, honest, take responsibility and play an active role in the learning process, so that better learning achievement can be achieved.

4. This research can be used as a material for consideration and reference for further researchers who conduct similar research.

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