

Improving Students' Vocabulary Mastery by Using Word Chain Game for the Eighth Grade Students of SMP N 2 Bumiayu at Academic Year 2020/2021

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Abstract

This research is designed of improving students' vocabulary by using word chain game for the eighth grade students of SMP N 2 Bumiayu at academic year 2020/2021. The research was described about students' problems in vocabulary mastery. It had been solved by choosing an appropriate game that is Word Chain Game. There were some problems during this research is students still had lack of vocabulary. The research questions in this research are: (1) To what extent is the students' vocabulary mastery taught with using word chain game for the eighth grade students of SMP N 2 Bumiayu at academic year 2020/2021? (2) To what extent is the students' vocabulary mastery taught without using word chain game for the eighth grade students of SMP N 2 Bumiayu at academic year 2020/2021? (3) Is there any significant improvement of the students' vocabulary mastery taught with and without using word chain game for the eighth grade students of SMP N 2 Bumiayu at academic year 2020/2021? In this research, the population was 300 students in the eighth grade. The samples were 2 classes. There were 30 students in Class VIII A controlled class and 30 students in VIII B as experimental class. The research applied non equivalent control group design. The instrument used to collect the data was multiple choice test. The value of t_{table} with $(df) = 58$ and a significance level of 0.025 (2-sided test) is 2.020. If $-t_{count} < t_{table}$ or $t_{count} > t_{table}$ then H_0 is rejected. The calculation results show $-3,077$ $-2,020$ or $2,425 > 2,020$, and the significance 0.05 ($0.19 < 0.05$). It means that hypothesis H_a was accepted and H_0 was rejected. There was significant improvement of the students' vocabulary mastery taught with and without using Word Chain game for the eighth grade students of SMP N 2 Bumiayu". For the English lecturer, it is hoped to teach this game so that the university students who will become teachers can apply this game while they are teaching vocabulary.

Keywords: vocabulary mastery, word chain game

Introduction

Vocabulary is one of the most aspects of the foreign language learning. Without vocabulary, we cannot communicate effectively. Thus, the first step to learn English is learning vocabulary. When English teaching and learning process occurs, students feel less interested in English language lesson because they don't understand every word or sentence in

English. Students only master some vocabularies; vocabulary that they master is the vocabulary they got from learning English from elementary school.

Teacher can start to teach English from vocabulary because vocabulary makes the students easily to master the meaning of the word or sentence. Thus, English teacher have to make students interested in learning English especially in learning vocabulary.

To make students easily in understanding learning vocabulary, the teachers may use the media. One of the media is game. Those are playing cards, playing alphabets, simulation, story completion, interviews, and role play. Based on those games give contribute a great deal to students in developing basic interactive skill. These activities make the students more active in learning process. At the same time, it makes their learning more useful and fun.

In this research, the researcher interested in teaching vocabulary by using Word Chain Game. This game focuses on how to make students easy and enjoy to study English vocabulary. We know that study vocabulary in common way is very bored. Because of its benefit, teaching learning process will be easy and enjoy of its activity. For this reason, word chain game is hopefully can solve the problem above. In using this media, students can work as a team or individually. Students work to complete the word chain game based on the following instructions written on the paper.

Based on the background of the study above, the problems are formulated as follows:

1. To what extent is the students' vocabulary mastery taught with using Word Chain Game for the eighth grade students of SMP N 2 Bumiayu at academic year 2020/2021?
2. To what extent is the students' vocabulary mastery taught without using Word Chain Game for the eighth grade students of SMP N 2 Bumiayu at academic year 2020/2021?
3. Is there any significant improvement of the students' vocabulary master taught with and without using Word Chain Game for the eighth grade students of SMP N 2 Bumiayu at academic year 2020/2021?

Literature Review

a. The Definition of Vocabulary

In the Oxford Learner's Pocket Dictionary (2003:428), a vocabulary is a list of all words that a person knows or uses, all words in the language, words and their meanings. All words in the language, the sum of words used, understood or commanded by specific people, social groups, occupations, industries, etc. Webster defines vocabulary as the sum of words used by people, or a specific purpose or person, or language, books, A collection list of words such as authors and scientific branches, in alphabetical order and definitions (Webster 1981:2560).

b. The Definition of Games

Rixon (1981), explains games are closed activities that have a beginning and an end with a winner who defines the end of the game.

Teachers need to plan games which they will use in the classroom can make their student enjoying, convenient, comfortable, and interested by mastering vocabulary. It stated the aim of vocabulary games and exercises are to develop student's vocabulary and practicing it through games in enjoyable activity. It means that games can be used as a new way to practice student's vocabulary without forcing them to remember a set of words. The teacher also needs to plan the games, so it makes students enjoy in learning vocabulary.

c. Junior High School Students in Learning Vocabulary

Nagy and Anderson (1984) found that a typical third grader knows about 8,000 words, and a high school student knows between 25,000 and 50,000 words, or even more. A student typically will learn between 3,000 and 4,000 new words each year (Graves & Watts-Taffe, 2002).

Method

Research Design

The research used quasi experimental method with non equivalent control group design. Sugiyono (2012) states that A quasi-experimental developed true experimental design which is difficult to do it. This research will apply non equivalent Control Group Design as the design. This design was exactly like pre-test, post-test control group design except that there was no random assignment into group (Sugiyono, 2012:79). The purposes of this method is to find out the influence of students’ vocabulary by using word chain game. The researcher will find the differences of students’ vocabulary mastery taught with and without using word chain game.

Table 1: Pre-test and Post-test Design

Controlled Class	Pre-test	No treatment (Conventional strategy)	Post-test
Experimental Class	Pre-test	Treatment (Word Chain Game)	Post-test

Subject of the Research

Subject of the research will take only 2 classes at the eighth grade students of SMP N 2 Bumiayu which divided 2 groups as experimental group and controlled group. Controlled group in class VIII.A will receive usual treatment or conventional way strategy as the habitually of the teacher and students in learning process. The experimental group in class VIII.B will apply Word Chain Game in treatment. Both groups will be given pre-test and post-test. Before doing it, class VIII.D as trial class will use pre-test and post test to know the validity of question in test.

Instrument of the Research

The total items of the test were 25 in the form of multiple choice tests. The researcher used the test instrument which was already been in trial class.

A. Validity and Reliability Testing

As previously mentioned, the researcher used tests as the research instrument. Both pre-test and post-test were intended to measure students’ vocabulary mastery. The tests should fulfill some factors to get the data as well. The factors test are validity and reliability of the tests. By using a valid and reliable instrument to collect the data, it was expected that the data and the result of the research itself also valid and reliable.

1. Validity Testing

Validity is the most important consideration in developing and evaluating measuring instrument. Ary et al (2010:225) defines validity as the extent to which as instrument measured what it claimed to measure. In other words, validity can be defined as the instrument that measures what is supposed to be measured.

2. Reliability

According to Howit and Cramer (2000:28) reliability is the extent to which the measure will give the same response under similar circumstances. In other words, reliability shows a measure of consistency in measure the same phenomenon.

In this research, the researcher used test where the researcher examines the test as try out only once. The tryout administered on April, 13th 2021. After calculating the reliability of pre-test and post-test, the researcher classified the reliability coefficient according to Sudjiono (1996: 209-230), as follows:

Table 2: Classification of reliability test

Reliability Test Coefficient	Classification
0.90-1.00	More highly
0.70-0.89	High
0.50-0.69	Fair
0.30-0.49	Low

Based on Table 3.2, the result of pretest and posttest must be reliable.

B. Normality and Homogeneity

1. Normality

According to Sujianto (2009:77) normality distribution test is a test to measure whether our data has a normal distribution or not. To know the normality, the researcher used One-Sample Kolmogorov-Smirnov test with SPSS. The hypotheses for testing normality are:

- a) H₀: Data is in normal distribution
- b) H_a: Data is not in normal distribution.

2. Homogeneity

Homogeneity testing is intended to make sure that the collected data in analysis is truly taken from a population which is too different each other. Especially in a study which is predictive, the model which is used must be appropriate with the composition and its distribution (Sujianto, 2009:112). To know the homogeneity, the researcher used One Way Anava with SPSS 22 as follows:

Table 3: test of homogeneity of variances VAR00001

Levene Statistic	df1	df2	Sig.
.461	1	18	.506

ANOVA

VAR00001					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	12.800	1	12.800	,165	.690
Within Groups	1398.400	18	77.689		
Total	1411.200	19			

Base on the output above, was known the significance value is 0.506. Because the significance value is bigger than α ($0.506 > 0.05$), can be concluded that the data both pretest and posttest having homogeneity of variances. In addition, the lower the value of Levena Statistic is the higher the degree of homogeneity.

C. Method of Collecting Data

Method of collecting data is the method to obtain the data in the research.

The aims of the data collecting in conducting scientific research was to get data that needed by the research. The technique of collecting data was clarified as follow:

1. Pre-Test

Pre-test was given to the students before the researcher taught by using word chain game. Pre-test is needed to know the basic competence for student and how far the students know about the subject that will be taught. Pre-test was given to the students at the first meeting on May, 5th 2021. The form of pre-test is multiple choices. The students must answer correctly based on information on the text.

2. Treatment

The treatment was conducted after the administration of the pre-test on May, 12th and 19th 2021. The purpose of treatment is to help students in understanding vocabulary, especially simple present tense. The experimental class was taught by using word chain game.

3. Post-Test

After the treatment, post-test was given to the students on May, 26th 2021. The test item in the post-test is exactly same as those in the pre- test. The goal of this test is to measure students' vocabulary mastery after treatment. It is intended to know the mean scores of experimental class. Post-test was given to the students at the third meeting. The form of post-test was also a multiple choice.

D. Analyzing of Data

The data result (post-test) was data of students score after taught by using Word Chain Game as a media. The first data (pre-test) was data of students score before taught by using Word Chain Game as a media. If the post-test on the students' vocabulary test is higher than pre-test, it means that teaching vocabulary by using Word Chain Game as a game is effective. To get the achievement of vocabulary test, the researcher give the students a test after got treatment teaching vocabulary by using Word Chain Game. In this research, the researcher used paired sample T-test at SPSS 22 to know the

significant difference improvement with and without taught using Word Chain Game on the students' vocabulary mastery.

Finding and Discussion

1. Comparison of Pre-test and Post test in Controlled and Experimental Class

In pre-test of controlled class and experimental class, the researcher calculated the result that had been gotten by the students in answering the question (test) and with using Word Chain Game in Experimental class. The score of pre-test in controlled class experimental class can be seen in the following table 4:

Table 4: Comparison of Pre-test and Post test in experimental class

Description	Controlled		Experimental	
	Pretest	Posttest	Pretest	Posttest
Total	1792	2248	2342	2432
Highest score	76	96	76	96
Lowest score	40	60	48	64
Mean	56,6	74,9	59,7	81
Median	56	76	60	80
Modus	60	76	56	80
Range	36	36	28	32
Interval	6	6	5	5
Standard deviation	10.56126	10.65747	7.57006	8.847105
Variants	111,5402	113,5816	57,30575	78,27126

Based on students' answer in experimental class, the researcher has calculated the comparison pre-test in Controlled Class and Experimental class consisted of 30 students. The total of pre-test was 2342, mean was 59,7, standard deviation was 7.57006, variants was 57,30575, median was 60, range was 28, modus was 56, interval was 5. The total post test was 2432, mean was 81, standard deviation was 8,847105, variants was 78,27126, median was 80, range was 32, modus was 80, interval was 5. The researcher got the highest score was 96 and the lowest score was 48. It can be seen on table 4.2

Based on the table 4.2, the result of comparison pre-test and post test in Controlled and Experimental class that the score of pre test and post test in Experimental class was higher than Controlled Class. Because Experimental class has used Word Chain Game to improve student's vocabulary mastery.

2. The Description of Data Taught Without Using Word Chain Game

Table 5: The score of pre test and post test in controlled class

No	Nama Siswa	Controlled Class	
		Pretest	Posttest
1	C1	76	92
2	C2	44	60
3	C3	68	80

4	C4	72	84
5	C5	56	76
6	C6	56	76
7	C7	60	88
8	C8	44	64
9	C9	48	76
10	C10	56	76
11	C11	68	92
12	C12	60	72
13	C13	56	96
14	C14	60	72
15	C15	40	60
16	C16	44	68
17	C17	40	64
18	C18	48	60
19	C19	48	60
20	C20	48	72
21	C21	60	76
22	C22	60	68
23	C23	60	76
24	C24	48	64
25	C25	48	68
26	C26	60	76
27	C27	76	88
28	C28	76	88
29	C29	64	88
30	C30	56	68

Comparison of Pre-test and Post test Controlled Class

In pre-test of experimental class and post test of controlled class, the researcher calculated the result that had been gotten by the students in answering the question (test) and without using Word Chain Game. The score of pre-test experimental class and controlled class can be seen in the following table:

Table 6: Comparison of pre-test and post test in controlled

Description	Controlled		Experimental	
	Pretest	Posttest	Pretest	Posttest
Total	1792	2248	2342	2432

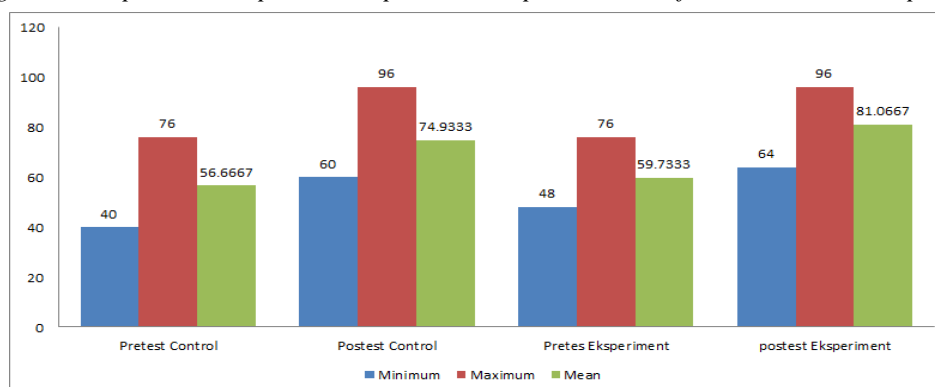
Highest score	76	96	76	96
Lowest score	40	60	48	64
Mean	56,6	74,9	59,7	81
Median	56	76	60	80
Modus	60	76	56	80
Range	36	36	28	32
Interval	6	6	5	5
Standard deviation	10.56126	10.65747	7,57006	8,847105
Variants	111,5402	113,5816	57,30575	78,27126

Based on students' answer in controlled class, the researcher has calculated the comparison pre-test in Controlled Class and Experimental class consisted of 30 students. The total of pre-test Controlled class was 1792, mean was 56,6, standard deviation was 10.56126, variants was 111,5402, median was 56, range was 36, modus was 60, interval was 6. The total post test Controlled was 2248, mean was 75,9, standard deviation was 10.65747, variants was 113,5816, median was 76, range was 36, modus was 76, interval was 6. The researcher got the highest score was 96 and the lowest score was 40. It can be seen on table 4.4

Based on students' answer in controlled class, the researcher has calculated the comparison pre-test in Controlled Class and Experimental class consisted of 30 students. The total of pre-test Controlled class was 1792, mean was 56,6, standard deviation was 10.56126, variants was 111,5402, median was 56, range was 36, modus was 60, interval was 6. The total post test Controlled was 2248, mean was 75,9, standard deviation was 10.65747, variants was 113,5816, median was 76, range was 36, modus was 76, interval was 6. The researcher got the highest score was 96 and the lowest score was 40. It can be seen on table 4.4

Based on the table 4.4, the result of comparison pre-test and post test in Controlled and Experimental class that the score of pre test and post test in Controlled class was lower than Experimental Class. It means that Controlled class can't apply Word Chain Game to improve student's vocabulary mastery.

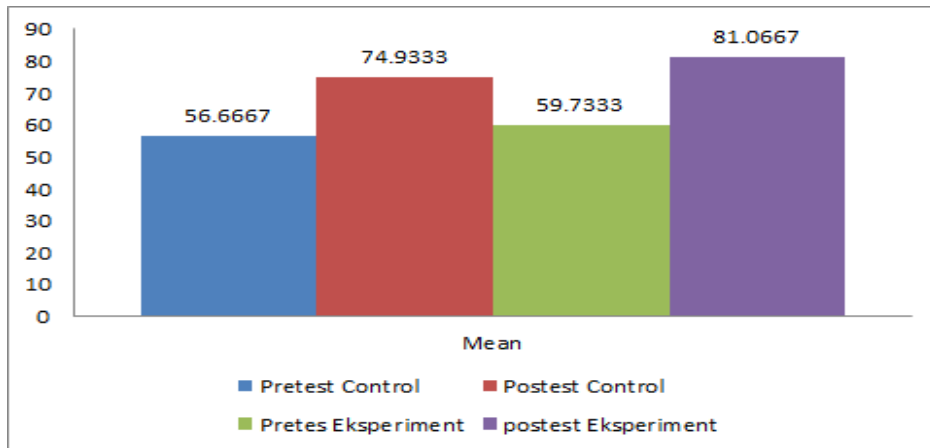
Figure 1: Graph based on pretest and post test comparison data of control class and experiment class



This graph is about pretest and post test value comparison data of controlled class and experiment class. The graph of minimum score of pre test controlled was 40 and post test

controlled class 96. And the graph of minimum score in experimental was 48 and post test experimental was 96.

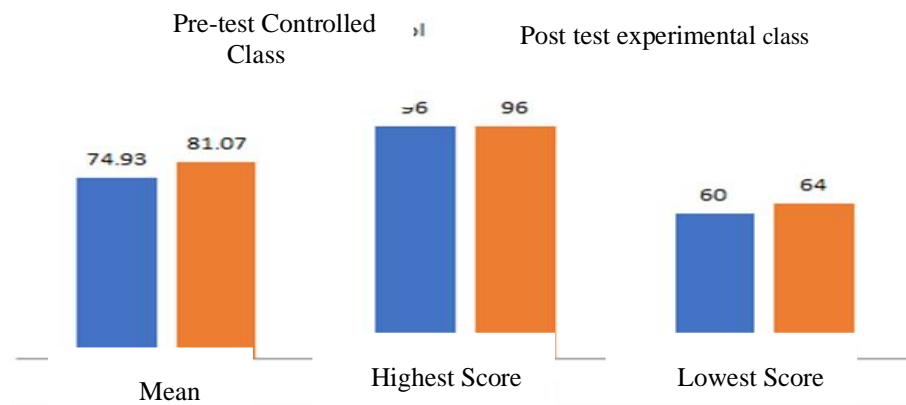
Figure 2: Graph based on average of pretest and post test comparison data of control class and experiment class



This graph is about average of pre-test and post test comparison data of control class and experiment class. From the graph, average of pre-test controlled was 56,6667, and average of pre-test experimental 59,7333. The average of post-test controlled was 74,9333, and the average of post test experimental 81,0667.

From the result of average pre-test and post test in controlled and experimental class, the average of pre-test and post test in eksperimental class was higher than controlled class.

Figure 3: Graph based on score of pretest and post test comparison data of control class and experiment class



This graph is about score of pretest and post test comparison data of control class and experiment class. From the graph, average of post-test controlled was 74,95, and average of post-test experimental 81,07. The highest score of post-test controlled and experimental was 96, and the lowest of post test controlled was 60 and the lowest of post test experimental 64.

From the result of average, highest and lowest of pre-test and post test in controlled and experimental class, the average, highest, lowest of pre-test and post test in experimental class was higher than controlled class.

3. Significant Improvement Taught With and Without Word Chain Game

This part consist of significant improvement taught with and without Word Chain Game. There are technique of analyzing data are :

a. Requirement Test

1) Validity Test Pre test in Controlled and Experimental Class

Based on the calculation by using *Anatest*, 25 items of the 30 try out items for pre test were valid. They were item number 1, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30 (Appendix 30)

2) Validity Test Post test in Controlled and Experimental Class

Based on the calculation by using *Anatest*, 25 items of the 30 try out items for post test were valid. They were item number 1, 2, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 23, 24, 25, 26, 27, 28, 30 (Appendix 31)

3) Reability Pre-Test and Post Test in Experimental Class

Table 7: Reability pre-test in experimental class

Question Item	Coefficient Value	Classification
Question 1	0.67	Fair
Question 2	0.57	Fair
Question 3	0.67	Fair
Question 4	0.50	Fair
Question 5	0.57	Fair
Question 6	0.77	High
Question 7	0.73	High
Question 8	0.67	Fair
Question 9	0.33	Low
Question 10	0.73	High
Question 11	0.60	Fair
Question 12	0.70	High
Question 13	0.63	Fair
Question 14	0.60	Fair
Question 15	0.77	High
Question 16	0.60	Fair
Question 17	0.57	Fair

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 August 7, 2021

Question 18	0.53	Fair
Question 19	0.57	Fair
Question 20	0.60	Fair
Question 21	0.67	Fair
Question 22	0.50	Fair
Question 23	0.50	Fair
Question 24	0.37	Low
Question 25	0.53	Fair

The reliability of the pre test was 0,30-0,49. It means that the reliability of the post test was low. The reliability of the pre test was 0,50-0,69. It means that the reliability of the pre test was fair. The reliability of the pre test was 0,70-0,89. It means that the reliability of the pre test was high.

Table 8: Reability Post Test in Experimental Class

Question Item	Coefficient Value	Classification
Question 1	0.83	High
Question 2	0.80	High
Question 3	0.83	High
Question 4	0.67	Fair
Question 5	0.77	High
Question 6	0.87	High
Question 7	0.90	High
Question 8	0.87	High
Question 9	0.73	High
Question 10	0.83	High
Question 11	0.73	High
Question 12	0.87	High
Question 13	0.73	High
Question 14	0.70	High
Question 15	0.77	High
Question 16	0.87	High
Question 17	0.87	High
Question 18	0.80	High
Question 19	0.73	High
Question 20	0.97	High
Question 21	0.90	High

Question 22	0.83	High
Question 23	0.87	High
Question 24	0.83	High
Question 25	0.70	High

The reliability of the post test was 0.70-0,89. It means that the reliability of the post test was high.

4) Reability Pre-Test and Post Test in Controlled Class

Table 9: Reability Pre-Test in Controlled Class

Question Item	Coefficient Value	Classification
Question 1	0.67	Fair
Question 2	0.57	Fair
Question 3	0.67	Fair
Question 4	0.37	Low
Question 5	0.67	Fair
Question 6	0.67	Fair
Question 7	0.57	Fair
Question 8	0.37	Low
Question 9	0.50	Fair
Question 10	0.67	Fair
Question 11	0.57	Fair
Question 12	0.63	Fair
Question 13	0.33	Low
Question 14	0.57	Fair
Question 15	0.63	Fair
Question 16	0.63	Fair
Question 17	0.53	Fair
Question 18	0.53	Fair
Question 19	0.53	Fair
Question 20	0.63	Fair
Question 21	0.63	Fair
Question 22	0.53	Fair
Question 23	0.57	Fair
Question 24	0.50	Fair
Question 25	0.60	Fair

The reliability of the pre test was 0.50-0,69. It means that the reliability of the pre test was fair.

Table 10: Reability Post Test in Controlled Class

Question Item	Coeffience Value	Information
Question 1	0.83	High
Question 2	0.77	High
Question 3	0.70	High
Question 4	0.60	Fair
Question 5	0.73	High
Question 6	0.70	High
Question 7	0.83	High
Question 8	0.80	High
Question 9	0.70	High
Question 10	0.77	High
Question 11	0.70	High
Question 12	0.80	High
Question 13	0.77	High
Question 14	0.80	High
Question 15	0.77	High
Question 16	0.80	High
Question 17	0.80	High
Question 18	0.70	High
Question 19	0.70	High
Question 20	0.77	High
Question 21	0.83	High
Question 22	0.63	Fair
Question 23	0.67	Fair
Question 24	0.77	High
Question 25	0.80	High

The reliability of the pre test was 0.70-0,89. It means that the reliability of the post test was high.

5) Normality Pre-Test and Post Test in Controlled class

Table 11: Normality Test in Controlled Class

		One-Sample Kolmogorov-Smirnov Test			
		Pretest Controlled	Posttest Controlled	Pretest Eksperimental	Post test Eksperimental
N		30	30	30	30
Normal Parameters ^{a,b}	Mean	56.6667	74.9333	59.7333	81.0667
	Std. Deviation	10.5612	10.6574	7.57006	8.84710
	Absolut e	.161	.160	.122	.125
Most Extreme Differences	Positive	.161	.160	.122	.114
	Negativ e	-.108	-.123	-.113	-.125
Kolmogorov-Smirnov Z		.880	.877	.670	.685
Asymp. Sig. (2-tailed)		.420	.425	.760	.736

Based on the output of SPSS 22 was known that the significant value (2- tailed) is 0.420 and 0,425. As explanation above, that H_0 is rejected if the significant value lower than 0.05 ($\alpha= 5\%$). Because the significant value (2 tailed) was bigger than α that are ($0.420 > 0.05$) and ($0.425 > 0.05$), It means that H_0 is accepted and H_a is rejected. So, it can be interpreted that the scores of both pretest and posttest in Controlled class are normal distribution.

6) Normality of Pre test and Post test in Experimental Class

Table 12: Normality Test in Experimental Class

		One-Sample Kolmogorov-Smirnov Test			
		Pretest Controlled	Post test Controlled	Pretest Eksperimental	Post test Eksperimental
N		30	30	30	30
Normal Parameters ^{a,b}	Mean	56.6667	74.9333	59.7333	81.0667
	Std. Deviation	10.56126	10.6574	7.57006	8.84710
	Absolute	.161	.160	.122	.125
Most Extreme Differences	Positive	.161	.160	.122	.114
	Negative	-.108	-.123	-.113	-.125
Kolmogorov-Smirnov Z		.880	.877	.670	.685
Asymp. Sig. (2-tailed)		.420	.425	.760	.736

Based on the output of SPSS 22 was known that the significant value (2- tailed) is 0.760 and 0,736. As explanation above, that H_0 is rejected if the significant value lower than 0.05 ($\alpha= 5\%$). Because the significant value (2 tailed) was bigger than α

that are $(0.760 > 0.05)$ and $(0.736 > 0.05)$, It means that H_0 is accepted and H_a is rejected. So, it can be interpreted that the scores of both pretest and posttest in Experimental class are normal distribution.

7) Homogeneity Pre-test and Post Test in Controlled Class

Table 13: Homogeneity Pre-test and Post Test in Controlled Class

Test of Homogeneity of Variances

Score Control

Levene Statistic	df1	df2	Sig.
.010	1	58	.920

ANOVA

Score Control

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	5005.067	1	5005.067	44.465	.000
Within Groups	6528.533	58	112.561		
Total	11533.600	59			

Based on the output above, was known the significance value is 0.920. Because the significance value is bigger than α ($0.920 > 0.05$), can be concluded that the data both pretest and posttest having homogeneity of variances. In addition, the lower the value of Levena Statistic is the higher than degree of homogeneity.

8) Homogeneity of Variances Pre-test and Post Test in Experimental Class

Table 14: Homogeneity of Variances Pre-test and Post Test in Experimental Class

Test of Homogeneity of Variances

Score Eksperimen

Levene Statistic	df1	df2	Sig.
.878	1	58	.353

ANOVA

Score Eksperimen

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	6826.667	1	6826.667	100.705	.000

Within Groups	3931.733	58	67.789		
Total	10758.400	59			

Based on the output above, was known the significance value is 0,353. Because the significance value is bigger than α ($0.353 > 0.05$), can be concluded that the data both pretest and posttest having homogeneity of variances. In addition, the lower the value of Levena Statistic is the higher the degree of homogeneity.

Discussion

Based on the observation sheet result of cooperative script mode on students' Vocabulary Mastery, the researcher found that the average of post test in Experimental is 81. The score is categorized as "Good" criterion. Furthermore, the result of students' Vocabulary Mastery without taught by using word chain game was 74 and it is included in "Good" criterion. It means that there is an improvement on students' vocabulary mastery with taught with using word chain game. The improvement is happened because the application of word chain game in teaching the student vocabulary mastery is very good, so that the students were more active to follow the teaching and learning process, and the teaching and learning process will be more fun and not boring because in learning the students give their motivation each other, even the result is not too good, but they had tried to created and improve their vocabulary mastery. It means that word chain game has the big effect to make the students easier to create their own word in English. By looking the review of related findings which had been discussed in chapter II, and if they were compared with this research result, it could be concluded that students' vocabulary mastery with using word chain game

Conclusion

Based on the result of the research, the conclusions of this research are:

1. Students' vocabulary mastery taught with using Word Chain Game for the eighth grade students of SMP N 2 Bumiayu at Academic Year 2020/2021 had higher score. It can be seen from the students' mean score of pre-test was 59,7 and mean score post-test was 81 in experimental class.
2. Students' vocabulary mastery taught without using Word Chain Game for the eighth grade students students of SMP N 2 Bumiayu at Academic Year 2020/2021 had lower score. It can be seen from the students' mean score of pre-test was 56,6 and mean score post-test was 74,9 in controlled class.
3. The value of t_{table} with $(df) = 58$ and a significance level of 0.025 (2-sided test) is 2.020. If $t_{count} < t_{table}$ or $t_{count} > t_{table}$ then H_0 is rejected. The calculation results show - 2,425 -2,020 or $2,425 > 2,020$, and the significance 0.05 ($0.1018 < 0.05$).

There was significant improvement of the students' vocabulary mastery taught with and without using Word Chain Game for the eight grade students of SMP N 2 Bumiayu at Academic Year 2020/2021.

Suggestions

The researcher got much informations in English teaching and learning after finishing this research. From this research, researcher saw some things need to be improved. It makes the researcher give some suggestions, as follow:

- a. For the English teacher, it is hoped to use Word Chain Game in teaching vocabulary. This research proved that Word Chain Game was effective to be applied in classroom.
- b. For the students, it is hoped to use Word Chain Game because it can make them to be able to memorize the vocabulary.
- c. For the next researcher, this research can help the researcher who will conduct further research in the same topic. The other researcher can get the information from this experimental research, even do a comparison between this research and another with the similar variable.
- d. For the English lecturer, it is hoped to teach this game so that the university students who will become teachers can apply this game while they are teaching vocabulary.

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