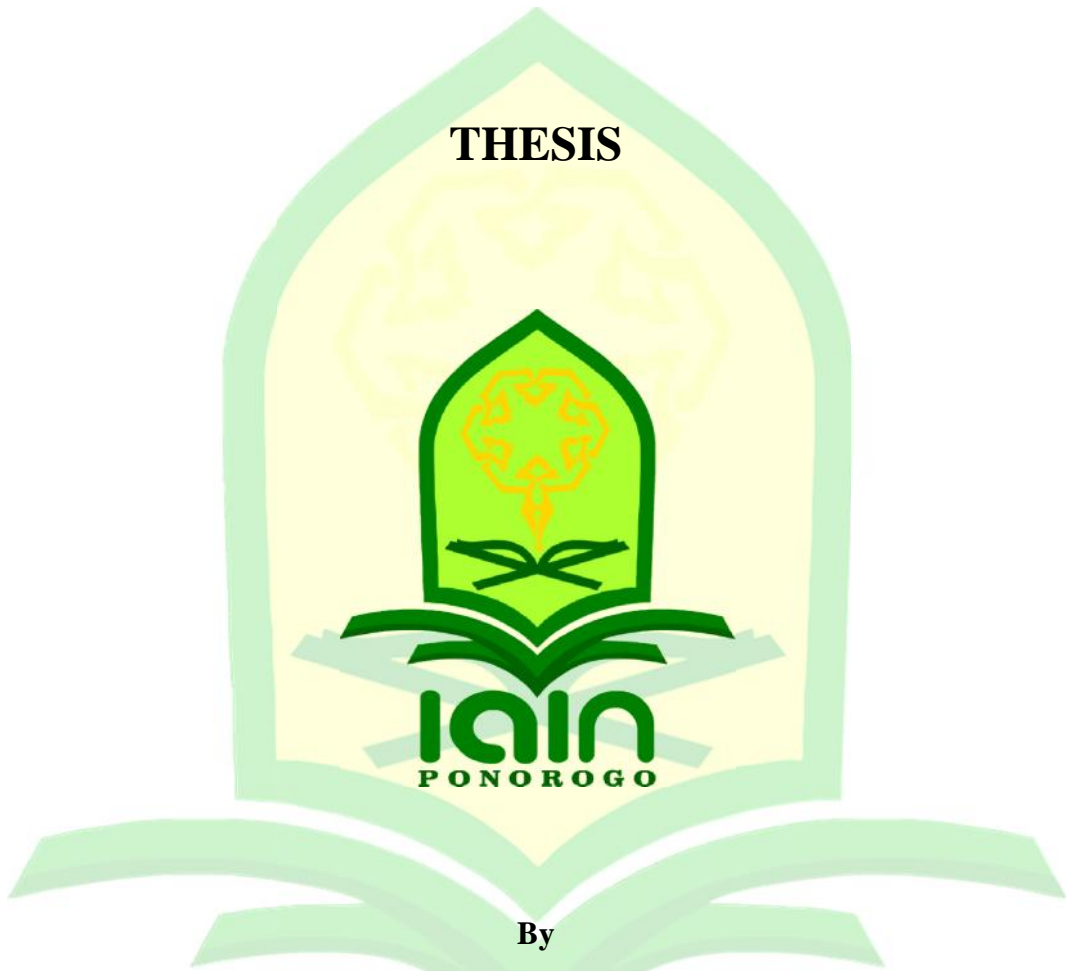


**THE EFFECT OF USING WORD CHAIN GAME ON  
STUDENTS' VOCABULARY MASTERY AT SEVENTH  
GRADE OF SMP MA'ARIF 1 PONOROGO**

**THESIS**



By

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## ABSTRACT

**AMALIYAH, DINATUL. 2020.** *The Effect of Using Word Chain Game on Students' Vocabulary Mastery at Seventh Grade of SMP Ma'arif 1 Ponorogo.* Thesis, English Education Department, Faculty of Education and Teacher Training, State Institute of Islamic Studies of Ponorogo. Advisor Dr. Dhinuk Puspita Kirana, M.Pd.

**Keywords: word chain game, vocabulary.**

Vocabulary is one basic component of language, there is not any language exists without words. So, the students will understand the reading text, they can speak a language and write some notes if they can master the vocabulary. In fact, the technique of teaching students' vocabulary is very monotonous, so that students become bored and uninterested. Therefore, the researcher chosed the word chain game to solve the students' problem. In this technique game that is played by using the last letter of the previous word to be the beginning of the next word. This game is a challenging and exciting activity in learning vocabulary.

The aim of this research was to examine whether there is a significant difference between the students' vocabulary mastery that are taught using word chain game and those who are not taught using word chain game at seventh grade of SMP Ma'arif 1 ponorogo.

The researcher applied a quantitative approach and used the quasi-experimental design. This research took two classes which were taught using different technique. The experiment class was taught using word chain game and control class was taught using discourse method. The sampling technique applied in this research was cluster random sampling. Cluster random sampling is based on the ability of researcher to divide the sampling population into groups (based upon visible or easily identifiable characteristic). The population was seventh grade students' of SMP Ma'arif 1 Ponorogo which consisted of 110 students. The samples were 43 students (22 students in experimental class, 21 students in control class). The techniques of data collection were test and documentation. The data were gathered through test. This research was conducted by the following procedure: giving pre-test, conducted treatment, and giving a post-test.

The data were analyzed after getting the score of the test and processed using T-test formula in SPSS version 16.

The result of this research showed that the experimental class had higher mean score of post-test than control class. The mean score of post-test in the experimental class was 87.85, while the class was control 80.95. Besides, the result of T-test calculation showed that value of  $t_{test}$  higher than the value of  $t_{table}$ . The value of  $t_{test}$  was 3,482 while the value of  $t_{table}$  with  $db = 41$  was 2,019. Based on those results, it can be concluded that  $H_a$  is accepted and  $H_o$  is rejected.

Based on the explanation above, it can be said that there was a significant difference between the students' vocabulary mastery achievement that were taught using word chain game and students who were not taught using word chain game. In other words, word chain game is effective to improve the students' vocabulary mastery achievement at seventh grade students of SMP Ma'arif 1 Ponorogo.

## APPROVAL SHEET

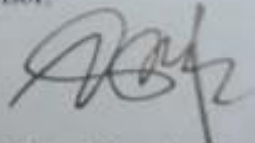
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Has been approved by the advisor and is recommended for approval and acceptance.

Advisor,

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Hari : Rabu  
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Ponorogo, 09 Desember 2020



Dinatul Amaliyah



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Ponorogo, 03 november 2020

Yang Membuat Pernyataan



DINATUL AMALIYAH

# CHAPTER I

## INTRODUCTION

In this chapter the researcher discusses about background of the study, limitation of the study, statement of problem, objective of the study, significant of the study and organization of the study.

### A. Background of the Study

English is a lesson that is taught in every of education, starting from elementary until university level. One of the important things to learn English is “Vocabulary” because it has a primary role for all language skills in teaching and learning process. English is taught in four language skills. They are listening, speaking, reading and writing. In order to increase the four skills, vocabulary is needed because the function and role of vocabulary are to build up the four language skills. Limited vocabulary mastery and knowledgement inhibits the students to develop the language skills. Nunan as cited by sofyan said that stated that vocabulary is one basic component of language, there is not any language exist without words.<sup>1</sup> So, that students can understand the reading text, they can write some notes, they can speak a language if they can master the vocabulary. Students need vocabulary in order to be easy in mastering English. It is impossible for the students to use the English language better if their vocabulary is low.

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<sup>1</sup> Sofyan Kamil Darajat, Muhammadiyah University of Purwokerto, *The Effectiveness of Environmental Mnemonic Technique (EMT) to Improve Students' Vocabulary Mastery in Vocation Highschool*, p. 4.

As cited by Richard and Renandya said that state, “without an extensive vocabulary and strategy for acquiring new vocabulary learners often achieve less than their potential and may be discouraged from making use of language learning opportunities around them such as listening to the radio, listening to native speaker, using the language in different contexts, reading or watching television”.<sup>2</sup> In other words, the students can use English easily by having an extensive vocabulary.

Vocabulary is the most important elements that should be taught for the first in teaching English. It is the basic learning in teaching and learning English. Teacher should be creative in choosing and simplifying the materials which can make students interested in mastery the vocabulary.

Large vocabulary will help students in understanding and conveying their feeling using target language. Learner is able to communicate to other people effectively or express their idea in both oral and written form by mastering vocabulary.

Mastering vocabulary is not easy, moreover other aspect of the language are sound and structure. Vocabulary is the important element in language. People cannot communicate without language and language would not exist without vocabularies.<sup>3</sup> Its mean that the first thing in learning English is the capability of vocabulary mastery, because we learn English as foreign language, we have to master and comprehend many skills.

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<sup>2</sup> Jack C, Richards and Willy A. Renandya, *Methodology in Language Teaching; An Anthology of Current Practice*, (New York: Cambridge University Press, 2003),p. 255.

<sup>3</sup> Horby, *Oxford advanced learner's or current English* (New York: Oxford University Press, 1995), 1331.



The objective of teaching vocabulary for the first grade of junior high school Islamic junior high school (SMP/MTs) is to enable students to master vocabulary about functional text and monologue text or paragraph in the form of descriptive and procedure. Furthermore, based on competency Standard – Standar Kompetensi (SK) and Basic Competency – Kompetensi Dasar (KD), the first grade students are expected to be able to express meaningful ideas in term of functional text and simple short essay in the form of descriptive and procedure to interact with people in their nearest environment.<sup>4</sup> The work of vocabulary is presented in the form of text types, usually known as genres.

The general curriculum objective is to “enable students to possess basic comprehensive language application ability, promote intellectual development and improve personal qualities through learning the English language.” In terms of vocabulary teaching, the 1993 syllabus required junior high school students to master 600 words. The requirement was soon found to be inadequate for students to develop English language skills for the 21<sup>st</sup> century. Therefore, the syllabus was revised in 2000. The revised syllabus added 220 words to increase the vocabulary size required of students. Students are expected to master about 830 words by the end of junior high school. MOE (ministry of education) published the National English Curriculum Standards (the trial version) in 2001. According to the Standards MOE, by the end of junior high school, students are required to master 800 words and 200 phrases and know how to use them both in four skills. In addition, they are

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<sup>4</sup> Depdiknas, *Panduan Penyusunan Kurikulum Tingkat Satuan Pendidikan Dasar dan Menengah*, (Jakarta: BSNP, 2008), p. 4.

expected to recognize 400-500 words. Students are also required to understand the listening materials which speed at 80 words per minutes.<sup>5</sup>

In 2011, MOE issued the revised version of National English Curriculum Standards. According to the new Standards MOE, students are expected to “master 1500-1600 words and 200-300 phrases by the end of junior high school.” The new standards have also required students to “achieve an extracurricular reading quantity beyond 150 thousand words by the end of 9<sup>th</sup> grade”. Teachers are encouraged to use teaching resources extensively to facilitate students’ self-directed learning. Revision in Standards by MOE put forward increasingly high demands to junior high school students in terms of the breadth and depth of vocabulary knowledge. The revisions also indicate the increasingly important role of vocabulary teaching in English language education.<sup>6</sup>

Problems in learning and teaching English still exist at school, because English is a language of the world’s own structures, pronunciation and vocabulary is also very different in the Indonesian. For example, students tend to forget the meaning of the word which have been taught or practiced before. Usually vocabulary is taught through memorizing words or drilling patterns. For teachers creating English teaching effectively and efficiently is not an easy job. Therefore, the English teacher must be able to organize teaching learning activities. They must selectively in present the materials and teaching techniques that suits student’s needs. A good teaching technique makes

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<sup>5</sup> Ministry of Education, *English Curriculum Standards*. (Beijing: University Publishing Group, 2001), p. 8-17

<sup>6</sup> Ibid

students understand and master the lesson like the other lesson which need a suitable technique and methods, so also with the teaching language. In reality, learning English specially to memorize vocabulary is boring for some students. The technique used in teaching vocabulary is monotonous. The students just memorize the changes of verbs, the word related to nouns, adjectives and adverbs. There are many techniques and methods of language teaching that can be selected for teaching vocabulary, some of the teacher are using kind of games such as: stick figure, puzzle, card game, wall cards, picture etc.

Based on the writer's observation through preliminary study during teaching learning activity at the first grade of SMP Ma'arif 1 Ponorogo, it was found that many students of first grade of SMP Ma'arif 1 Ponorogo had difficulties in learning English especially in the vocabulary. And from the results of previous interviews by researchers is also known that SMP Ma'arif 1 Ponorogo has never used the word chain game engineering to develop vocabulary students, the teaching system also just by providing students a text and then instructed to define difficult words. The students had difficulty in learning English, they were afraid, they feel difficult to spell, to choose the correct words and understand the meaning of the words based on contexts, and they feel bored and they were bored and a lack of interest in vocabulary, they had difficulty understand written and spoken text, usually students easily forget the meaning of words that have been taught, the students' were shy and afraid of making mistake of uttering the English word even though the teacher

has used some teaching techniques such as teaching vocabulary by using synonym, and antonym.<sup>7</sup>

The game is one of the strategies in teaching that makes students motivated and intriguing of his spirit to learn English. The use of games is very helpful for teachers to awaken students' motivation and interest in learning. And also, explained that the game gives participants a feeling of competition to participate in the process of learning the vocabulary and motivating them to repeat it enthusiastically.<sup>8</sup> There are many interesting types of games to teach vocabulary. It probably can be solved by using the appropriate teaching technique. As a teaching technique, the researcher chooses a vocabulary game.

Games have been shown to have advantages and effectiveness in learning vocabulary in various ways. First, games bring in relaxation and fun for students. Second, games usually involve friendly completion and they keep learners interested.<sup>9</sup>

The type of vocabulary game is called word chain game. The game is playing by using the last letter of the previous word to be the beginning of the next word. This game is a challenging and exciting activity in learning vocabulary. Statement as cited by M. Fadhly Farhy Abbas, he said that word

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<sup>7</sup> An observation at SMP Ma'arif 1 Ponorogo on December 2019.

<sup>8</sup> Goh Ying Soon and Yee Leong Yeng, Teknologi MARA University of Malaysia *Empirical Study on The Use of Puzzle Games for Improving Chinese Character Acquisition of Non-Native Learners of Chinese Language*, Volume 4 Issue 2 2015 Academia Journal UiTMT (<http://journale-academiauitmt.edu.my/>).

<sup>9</sup> Nguyen Thi Thanh Huyen and Khuat Thi Thu Nga, 'Learning Vocabulary through Games', <http://www.teflgames.com/why.html>, 14st February 2020.

chain is a vocabulary game in which the end of the word is the beginning of the next one. Example: love, eat, tea, apple, ear, room, monkey.

The researcher argued that using Word Chain Game seems to be a good alternative and effective way of teaching English in SMP Ma'arif 1 Ponorogo. This teaching technique can make students active in teaching and learning process, it also allows students to be creative without being shy. In addition, this technique can be improving the students' ability in mastering vocabulary on their knowledge. The writer have three previous studies that underline this research, and that makes this study different from the others study, such as the first, this study was conducted in state junior high school in Ponorogo. Second, in this study take a group system. The last, the teaching techniques use quasi-experimental study and the procedures of this study are easy to remember.

So, this research focuses on descriptive text. Descriptive text has word content in the form articles, preposition, conjunction, auxiliaries, etc. Content words can be divided into three general ideas, they are 1) word naming things, idea, entities, that new might call them Noun. 2) Words naming action called Verb. 3) Words used to describe the qualities of those things or action adjective and adverbs.

According to the explanation above, the writer intends to conduct a quasi experimental research entitled: **The Effect of Word Chain Game on Students' Vocabulary Mastery (A Quasi-Experimental Study at Seventh Grade Students of SMP Ma'arif 1 Ponorogo).**

## **B. Limitation of the Study**

Referring to the background of study that has described above, the researcher provides limitation of problem to avoid discussion that do not including to studies. The limitations of study are:

1. This study focuses on the use word chain game on students' vocabulary mastery
2. The research focuses on the types of vocabulary in the form of nouns, verbs, adjectives, and adverbs.

## **C. Statement of the problem**

Based on the background above, the formulation of the problems of this research identified as follow. Do students who are taught vocabulary using word chain game achieve score better than those who are taught without using word chain game?

## **D. Objective of the study**

Referring to the formulation of the problem above, the objective of this research is to know whether the students who are taught vocabulary using word chain game will show better achievement than those who are taught without using word chain game.

## **E. Significant of the Study**

The results of this study are expected can give both theoretical and practical contribution in educational environment.

### **1. Theoretical**

- a. The result of this study will be useful addition to scientific resources available in the field of education.
- b. For further researchers, this study can enrich researchers knowledge related to the use and benefits of using word chain game on students' vocabulary skill and also can be used as a reference to conduct further research in teaching vocabulary.

### **2. Practical**

- a. For the students, the result of this study is expected to provide motivation and reference to them about how to develop their vocabulary in English. It is important because one of the aims of teaching English in Indonesia is to get them to use the language. It can help them deal with the real situation in the classroom. Besides, this can be useful for the classroom environment which makes the class enjoyable.
- b. For English teachers, these results of study are expected to provide the information for them about learners' vocabulary mastery in learning English.

## **F. Organization of the study**

In this research, the researcher uses the organization of the study that consists of five chapters as follow:

Chapter I is introduction. This chapter is global description about whole content of the thesis. It consists of background of study, limitation of the problem, research problem, objective of study, and significance of study.

Chapter II is review related literature that consist of theoretical background, previous research finding, theoretical framework, and hypothesis.

Chapter III is research methodology consist of research design, population and sample, instrument of data collection, technique of data collection, and technique of data analysis.

Chapter IV is finding and discussion. This chapter contains a discussion of research result include findings from the research. It includes data analysis, discussion, and interpretation.

Chapter V is closing. This chapter contain of conclusion of the whole thesis and also the recommendation from the writers.



## CHAPTER II

### REVIEW OF RELATED LITERATURE

In this chapter, the researcher discusses about theoretical background, theoretical framework, previous research finding and hypothesis.

#### A. Theoretical Background

##### 1. Vocabulary

###### a. The Nature of vocabulary

Vocabulary is one of the most important elements in a language. People use the vocabulary to communicate in their daily conversation. Hornby defines that vocabulary is all the words that a person knows or uses. Talking about vocabulary, there is some experts' statements that argue about the definition of vocabulary. Harris and Hodges said that "vocabulary is a tool to communicate known words with others". It means vocabulary is the main goal and the important aspect for students to master their skill to read, listen, write, and speak in learning English.

Vocabulary is a list of words which have meaning and a certain language if the language is used.<sup>10</sup> According to Hornby, vocabulary is:<sup>11</sup>

- a. Total number of words which (with rules for combining them) make up a language.

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<sup>10</sup> Suyanto, Kasihani K. E, English for Young Learners (Jakarta: PT Bumi Aksara, 2007), 43.

<sup>11</sup> AS Hornby, *Oxford Advanced Learner's Dictionary of Current English*. Sixth Edition, (London: Oxford University Press, 1974), 959.

- b. (Range of) words known to, or used by a person, in a trade, profession, etc.

In this study, there are two clarifies was about vocabulary according to the experts. Richard and Renandya mention that vocabulary is a great part of the premise to how well learners speak, listen, read, and write. And also the center segment of language proficiency.<sup>12</sup> The second, Nunan said that vocabulary is a part of target language words. It can be said that vocabulary is one of the language components that must be learned in learning English. From the definition above, the researcher concludes that vocabulary is the important aspect in language learning to develop the four skills of students' ability in a process of teaching language. The students will be difficult to speak, write, listen, and read English without knowing any vocabularies. Because the vocabulary is the first element to be developed in learning English. The other components or skills of English will be easier to learn and understand if the students know a lot of vocabularies.

In English learning, students must be smart and consistently in using the vocabulary that was already known. That is the way the teacher needs to apply the best method and the interactive way to make students interested in developing their vocabulary. Students' vocabulary can be divided into two kinds, namely active and passive vocabulary.

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<sup>12</sup> Jack C. Richards and Willy A. Renandya, *Methodology in Language Teaching: An Anthology of current practice*, (USA: Cambrige University Press. 2006), p. 255.

Active vocabulary refers to students understanding it. They can pronounce correctly and use them constructively in speaking or writing. Active vocabulary is appropriate for the intermediate students because to improve their oral skill. The teacher can help them to enrich active vocabulary by applying appropriate method.

On the other hand, passive vocabulary is kinds of words in which students can understand about it when they are reading some English text, listening in target language. It does not used in writing or speaking. Actually, advanced learner more mastering of active vocabulary because they are the first learner before starting to learn passive vocabulary. So, the teacher can explained both of them different.

Vocabulary takes an important role to build the language proficiency in the teaching English. The student will have a good language proficiency in four language skills if the students know a lot of vocabularies. In language teaching all of vocabulary should be use by students when they communicate and speak with other students. This skill will be improved their speaking skill by knowing a lot of vocabularies.

#### **b. The Importance of Vocabulary**

Vocabulary plays a very important role in developing the four language skills: listening, speaking, reading, and writing. The vocabularies which have been many students can be easier they develop

the language skills. In addition, for those who are learning English as a foreign language, vocabulary is needed. Richards and Renandya stated that, “without an extensive vocabulary and strategy for acquiring new vocabulary, learners often achieve less than their potential and may be discouraged from making use of language learning opportunities around them such as listening to the radio, listening to native speakers, using the language in different contexts, reading or watching television.”<sup>13</sup> So, the students can develop the language skills easily by increasing the vocabulary.

Moreover, Gass and Selinker show in her overview of sentence comprehension that vocabulary is important. Lexical information is clearly used in helping to determine syntactic relationships. Furthermore, Gass and Selinker state that, “the lexicon is also important in reading, but in the vast bulk of the world’s orthographies the writing system obviates the need for the reader to segment the text into words”.<sup>14</sup> In accordance with the statements above, it can be concluded that, vocabulary is important to build up the language skills and to get the sentence comprehension.

### **c. Kinds of vocabulary**

Vocabulary is divided into two they are function words and content words, words of these kind articles, preposition, conjunctions, auxiliaries, and etc. The vocabulary cannot be added the word with

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<sup>13</sup> Jack C. Richards and Willy A. Renandya. Loc. Cit.

<sup>14</sup> Susan M, Gass and Larry Selinker, *Language Acquisition*, (New Jersey: Erlbaum Associates. 2001), p. 374.

preposition or auxiliaries or modal or structure. This is a function word mean. Content words in the other hand can be added to at any times as a scientific advance make a new word e.g. words that mean a quality or size will add “a” and follow “of”.

Example: A piece of bread, a head of lettuce, a spoon of sugar.

Content words can be divided into three general ideas, they are:

a. Words naming things, idea, entities, that new might call them Noun.

Example: Tables, Book, Chair, wardrobe, Banana, etc.

b. Words naming action called Verb. Example: Walk Run, Fly, climb, etc.

c. Words used to describe the qualities of those things or action adjective and adverbs.

According to I.S.P Nation has divided vocabulary into two they are:

1) *Receptive vocabulary*: knowing a word involves being able to recognize it when it is heard (what is the sound like?) or when it is seen (what does she like?) and having an expectation of what grammatical pattern the word will be occurrence. This can all be assessed if the word form sound right or look right.

2) *Productive vocabulary*: knowing a word involves being able to pronounce the word, how to write and spell it, how to use it in grammatical pattern along with the word usually collocates with, it also involves not using the word too often it is typically a low-

frequency word, and using it in a suitable subtitle for the word if there any.<sup>15</sup>

#### **d. The Function of Vocabulary**

Vocabulary is total number of words which (with rules for combining them) make up a language, or (range of) words known to, or used by, a person, in trade, profession, etc.<sup>16</sup>

The words “use” has a meaning the function or the advantage. In other word, vocabulary use we have used in our daily language and to communicating with other people in the world. It means that when we use words, we should know the function or the use of our words our vocabularies because it can guide us in understanding the language which we learn.

Vocabulary has great function to construct sentences in language. Vocabulary is like the bone of our body. Without bone, our body will not be able to be as perfect as possible. Nobody can be expressing his/her feeling to others. So, the vocabulary is supposed as the bone of language, without vocabulary, the language cannot be developed.

#### **e. The purpose of learning vocabulary**

To learn something, people have to know the purpose of the things they learn. In this case the purpose of learning vocabulary is to help the learners to be easier to reveal an idea because words consist of various vocabularies in the language and it is a tool for speaking or

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<sup>15</sup> I.S.P. Nation, *Learning Vocabulary in Another Language*, (Cambridge: Cambridge University Press, 2001)

<sup>16</sup> Hornby, *Oxford Advanced Learner's Dictionary*, 1959

writing. The composition of words is prepared in detail like a dictionary with a brief explanation through the games used in a field science. This problem is not only enriching vocabulary through lesson language but also through other study.

Vocabulary mastering is the ability to get and receive a lot of words, by having and mastering it. We will know the meaning of vocabulary in the context. And it can also help to avoid making the mistakes in identifying a language with dictionary and guide us in making the equivalence of the second language to native language, so that mean:

- a. Helping us master the kinds or levels of meaning, such as the words with their lexical meaning are, they are by no means the only essential meaning in the symbols and devices of a language and also the lexical content the various words as listed and defined in a dictionary.
- b. The vocabularies is found in a language, therefore the language we use every day consists of various vocabulary. Whatever people may do, they come together whether they play, fight, make love, they talk; we live in a world of words. Television furthers more of words. As a hardly moment of our waking lives is free from word, we talk to our pts sometime we talk to ourselves.
- c. Words can express our ability. When a person showed his speech in front of the public, his words can bring ourselves to the other world,

his ability in speech is well known all over the world, and that all start from words.

- d. Vocabulary is usually used in all aspects in student learning and that can improve their skill in English, whether in listening, in speaking, reading or writing. Student cannot speak well if they do not know vocabulary, they also do not listen carefully if they do not know vocabulary, and may have stuck in reading if they do not know vocabulary. So, it's mean that vocabulary helps students to learn the language and improve it. In writing vocabulary function as a tool to express a successful learning, it shows a good feedback to the learning. According to William D. Baker, he said that "Writing as a language skill which needs a lot of words in it because no words no writing".<sup>17</sup> In reading the reading section of each book contains materials on techniques of reading studying, as well as on such skills as test taking test and reasoning.

From those explanations, it can be concluded that vocabulary is involved in each aspect of our live, and that mean it is important to be acquire, especially when we talk.

#### **f. How to teach vocabulary**

In teaching vocabulary, the teachers are expected to choose and use the right techniques so that students can understand new words easily. Not only for remembering the new words but also overcome

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<sup>17</sup> William D. Baker, *The Experience of Writing*, (Prentice Hall, 1965)



students from the flavor of boredom. Harmer mentions that the following aids can help to explain new vocabulary.<sup>18</sup>

### 1) Realia

This is the word to refer to the use of real objects in the classroom. Thus the words 'book', 'pencil', 'chair', can be easily explained by showing students a book, a ruler, or a chalk. This is clearly satisfactory for certain single words, but the use of realia is limited to things that cannot be reached in the classroom.

### 2) Picture

Pictures are clearly indispensable for the language teacher since they can be used in so many ways. Pictures can be used to explain the meaning of vocabulary items: the teacher can draw pens, rules, pencils, and books in the blackboard/whiteboard, or have magazine pictures of trucks, bicycle, train, or bus on the cardboard.

### 3) Mime, action, and gesture

The meaning of words and grammar either on the object it is all difficult to explain by using realia or in picture. An action, in especially is probably better explained by mime. The use of gesture is to explain the word like 'from', 'to', etc. this shows that the past is being talked about (the teacher gesture backwards over his shoulder)

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<sup>18</sup> Jeremy Harmer, *The Principle of Language Teaching*, (London: Longman, 1983), 85-86

#### 4) Contrast

A visual element is sometimes also not enough to explain meaning and contrast can be used. Thus, the meaning of “full” is better understood in context of “empty”, “big” in the context of “small”, etc.

#### 5) Enumeration

The words “vegetable” is difficult to explain visually. If the teacher rapidly lists from the sample of the vegetables (or counting) a number of vegetables, the meaning will become clear.

#### 6) Explanation

Explanation of a vocabulary meaning is very difficult to understand if only with a grammatical explanation. It will be important in giving such explanation to make sure that the explanations include information about when the item can be used. For example, it would be unsatisfactory just to say that “mate” is a word for “friend” unless you show that informal English is daily language and only be used certain context.

#### 7) Translation

From year to year of translation into a style that is considered a mistake. In fact, if the teachers always translating, this will inhibit the students in learning because they want to use target languages, not their own. Nevertheless, it seems ridiculous not to translate if by doing so; a lot of time can be saved for other activities. If the

students do not understand a word and the teacher cannot think how to explain it, he can quickly translate it.

#### **g. Problem in learning vocabulary**

In learning vocabulary students might get some difficulties. Some factors that often cause these problems are.<sup>19</sup>

##### 1) Pronunciation

Research show that the words that are difficult to pronounce are more difficult to learn. Difficult words will be potentially as a type of foreign sound heard by some groups of learners.

##### 2) Spelling

Sound-spelling mismatches are likely to be the cause of errors, either of pronunciation or spelling, and can be said as a word's difficulty. Words that contain silent letter are particularly problematic: foreign, listen, headache, climbing, bored, honest, cupboard, muscle, etc.

##### 3) Length and complexity

Long words seem to be no more difficult to learn than short ones. But, as a rule of thumb, high frequency words tend to be short in English, and therefore the learner is likely to meet them more often, a factor favoring their 'learnability'.

##### 4) Grammar

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<sup>19</sup> Scott Thornbury, How To Teach Vocabulary, 27-28.

Grammar also became a problem in learning vocabulary because it relates to the words, especially if this different from that of its LI equivalent.

#### 5) Meaning

When two words overlap in meaning, learners will feel confusion. Make and do are a case in point: you make breakfast and make an appointment, but you do housework and do a questionnaire.

#### 6) Range, connotation and idiomaticity

Words that can be used in a wide range of context will generally be perceived as easier than their synonyms with a narrow range.

Learning vocabulary seems to be easy to learn. But these are also the most difficult thing to do. Because in learning vocabulary we not only know or learn the meaning but also learn the usage, pronunciation, grammar and so on. It is often make difficulties for students to comprehend vocabulary.

#### **h. Ways to improve vocabulary**

The most important part of the language learning process is to building our vocabulary gradually. If we do not have a basic vocabulary to apply, we cannot study grammar, we have absolutely no use for spelling or pronunciation exercises and writing or reading is definitely

out of the question. That is why the importance of having a good vocabulary for beginners learners, so that the vocabulary mastery of student increases and strong in his memory.

Here there are few ways for us to improve vocabulary:

#### 1) Translated Text

This is great method to use in the beginning of our studies, when we cannot handle reading (and understanding) a text solely in the foreign language we are emphasizing on. Translated texts act as a natural dictionary as they will involuntary form connections as we read the two versions of the same text. The weakness is if the the text is too ambiguous and complicated, this will be the risk of misunderstanding or error of the entire phrase that attributing the meanings to certain words. That is why the text is translated and well written is very important, so that the words are not confusing with other words that mean different and so on. We should also look for the most basic translated texts at first. Do not worry if you find it silly to translate “it is hot during the summer”, it is starting point and we will not be better off skipping it.

#### 2) Vocabulary Games

Vocabulary games are great way to enhance our word base, but they should usually be used only as an additional method for this purpose. In fact with vocabulary games are students cannot understand the same number of new words that have been taught as

say translated texts or other methods that deal with improving your vocabulary, but they can be a fun alternative to take during those study brakes. This game makes us learn while relaxing and having fun is a lot easier for a longer period of time.

### 3) Foreign Language Media

Media is obviously a strong source of vocabulary gain and the fun fact about it is that you will not be shedding a sweat learning the new words, as they will come naturally. Every bit of radio, TV, stationary add, computer game or any other type of media we can watch or hear in the foreign language we are studying should be treated as an opportunity to improve vocabulary. Sometimes, in some languages this method is indispensable to learn to be easier especially in English. If you find a good learning source, we could use foreign language media as main method of vocabulary increase, but if these sources are scare, we shouldn't rely solely on it.<sup>20</sup>

In this research, the writer uses: "Vocabulary Game" to teach vocabulary using word games.

#### **i. Teaching vocabulary**

Learners see vocabulary as being a very important part of language learning and one of the difficulties in planning the vocabulary component of a course is making sure that it does not overwhelm other essential part of the course. The best way to avoid this is for the teacher

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<sup>20</sup> <http://www.ncbi.nlm.nih.gov/pubmed/16080348>, accessed 28<sup>th</sup> Desember 2019

and course designer to have set guiding principles that can be applied in a variety of teaching and learning situations.<sup>21</sup>

There are several principles for teaching vocabulary as follow:<sup>22</sup>

- 1) Focus on the most useful vocabulary first of circumstances

The other vocabulary has a more limited use. The vocabulary will be given by the teacher to his students is the vocabulary that will be needed in their activity every day. For example, the teacher gives some vocabularies relate to the objects in the classroom, the objects in the kitchen, etc. some words can be used in a wide variety.

- 2) Focus on the vocabulary in the most appropriate way

The first principle is to estimate the exactly words to learn and teach. This principle looks at how they should be taught and learned with appropriate method. For example, the teacher uses total physical response, silent way, direct method, etc. which are appropriate with the theme of subject.

- 3) Give attentions to high frequency words across the four stands of a course.

High frequency vocabulary needs to occur in all four stands of a course. It should get accidental attention through teaching and study and should be met in used in communicating messages in listening, speaking, reading and writing. High frequency

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<sup>21</sup> David Nunan, *Practical English Language Teaching*, 1<sup>st</sup> Edition, (America: McGraw-Hill Companies, 2003), p. 135

<sup>22</sup> Nunan, *Practical English Language Teaching*, 1<sup>st</sup> Ed, P. 136

vocabulary should also be fluently accessible for receptive use. For example, the teacher gives frequency word in speaking. The teacher asks the students to mention they use to take a bath.

4) Encourage learners to reflect on and take responsibility for learning

So far, the principle is associated with the vocabulary that selected to be taught according to the condition of learning needs. There is an important principle that lies behind choosing and learning and that is that learners need to realize that they must be responsible for their own learning. So that, the teacher should be creative in their teaching. For example, they can select specific words they will focus on each day. They can pre-select the words or they can have their students decide what words will be studied. For example, if students are going to study about fruits, they could learn a different variety each day, or teacher could ask each student to bring a new words relating to the fruits on the next attendance.

**j. Definition of vocabulary mastery**

To understand the language, the vocabulary is very necessary to be mastered by the student. Vocabulary mastery is needed to express an idea and to be able to understand other people's sayings. According to Webster mastery refers to (1) a. the authority of a master: dominion, b. the upper hand in a contest or competition; superiority, ascendancy and (2) a. possession or display of great skill or technique, b. skill or knowledge that makes one master of a subject comment. While Hornby



defines mastery as complete knowledge or complete skill. From that definition, mastery means complete knowledge or great skill that makes someone a master in a certain subject.

The success in expanding the mastery of their vocabulary requires motivation and interests themselves on the words of a language. From the definition above, we can conclude that vocabulary mastery is an individual's great skill in using words of a language, which is acquired based on their own interest needs and motivation.

#### **k. Testing vocabulary**

To improve students' vocabulary, teachers also need some tests to know how many words have known. According to Pavlu there are fourteen types of testing vocabulary. In this study, the researcher will use one types of testing vocabulary, there is multiple choice.

According to Thronby, multiple choices are a popular way of testing in that they are easy to score and they are easy to design. This technique is easy to marks but difficult to design. It also can be used test single words in sentence or in text. In this study the researcher will use 20 multiple choice about describing things material, Such as about colors, job and characters and etc.

#### **l. Assessing rubric of vocabulary**

The assessment rubric is an assessment guide that describes the criteria that the teacher wants in assessing or grading the results of student work. The rubric needs to list the desired characteristics that

need to be shown in a student's work accompanied by a guide for evaluating each of these characteristics.<sup>23</sup> Below is a vocabulary assessment rubric as follows:

**Table 2.1**  
**Assessing Rubric of vocabulary**

	Rated aspect	Indicator	Score
1	Interpret the vocabulary	Students can interpret the vocabulary well	20
		Students can't interpret the vocabulary well	10
2	Read the vocabulary	Students can read the English vocabulary well	20
		Students can't read the English vocabulary well	10
3	Recite the vocabulary	Students can profit vocabulary fluently	20
		Students can't profit vocabulary fluently	10
4	Write the vocabulary	Students can write vocabulary well and quickly in the notebook	20

<sup>23</sup> Samhis setiawan, "Pengertian Rubrik-Tujuan, Jenis, Isi, Macam, Langkah, Manfaat, Contoh, Para Ahli" (<https://www.gurupendidikan.co.id/pengertian-rubrik/>. Accessed on 1<sup>th</sup> desember 2020, 14.00)

		Students can't write vocabulary well and quickly in the notebook	10
5	Using vocabulary in learning	Students can use English vocabulary in the classroom learning	20
		Students can't use English vocabulary in the classroom learning	10

## 2. Word Chain Game

### a. The Nature of Word Chain Game

The word chain game was invented in the late nineteenth century by Carroll, author of *Alice in Wonderland*. He also states that word chain is a kind of game purposing to improve the players' ability in mastering vocabulary or words.<sup>24</sup> Furthermore, Hemscott as cited by Ten Nove Melfin Lase that said states that, "it is also an aid to spelling, playing word games help create an interest in words and their spelling",<sup>25</sup> Decure as cited by M. Fadhly Farhy Abbas that said states

<sup>24</sup> Ten Nove Melfin Lase, *The Effect of Word Chain Game on Students' Vocabulary Mastery ( An Experimental Study at Seventh Grade Students of SMP Negeri 1 Pandan 2017/2018 Academic Year)*, jurnal linear, Institut Pendidikan Tapanuli Selatan (IPTS), Vol.1 No.3 Oktober 2018, p. 48.

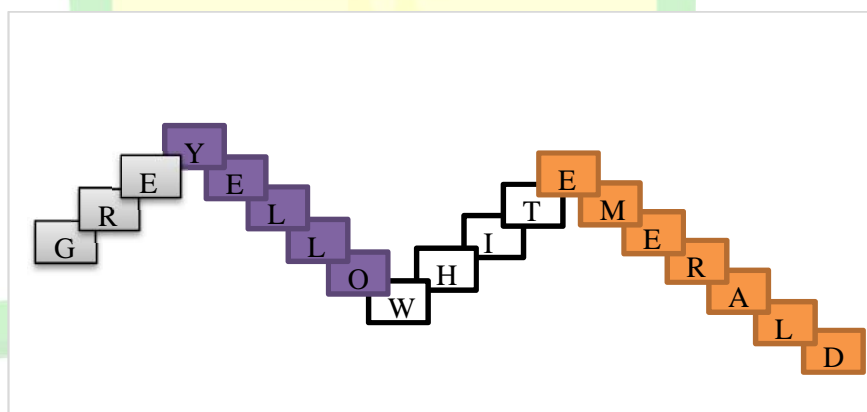
<sup>25</sup> *Ibid.*

that word chain is a word game in which the last letter word is the beginning of the next word.<sup>26</sup>

In playing word chain game, the participants are able to use the last letter of previous word to create a new word. In this game, the player must write a word that begins with the last letter of the previous word, in this study the researcher use three types as in the following example:

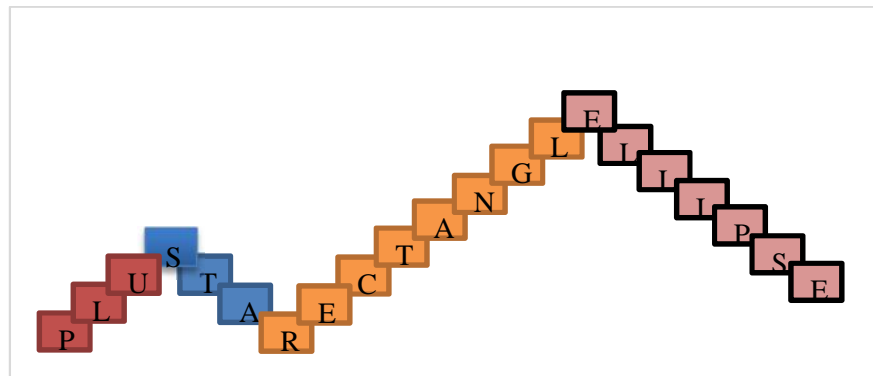
**Figure 2.1**  
**List of playing word chain game**

➤ **Colors**

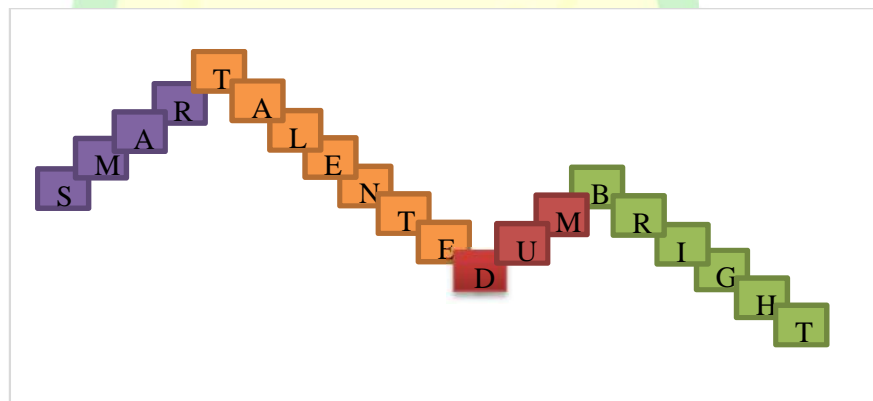


<sup>26</sup> M. Fadhly Farhy Abbas, Lancang Kuning University of Riau, *Applying Word Chain Game to Improve Students' Vocabulary Mastery*, p. 46.

➤ **Shapes**



➤ **Characters**



**b. The Purpose of Using Word Chain Game**

Gretchen E. Weed as cited by Miftahul Jannah stated that using game in teaching language has many purpose as follows:

- a. Physical activity: to release physical and nervous tension and to promote mental awareness by breaking the routine of drills.
- b. Enjoyment: to create an atmosphere of fun and interest that will help the students look followed to their English lessons. And games learned in class are also something they can do outside of class to have fun.

- c. Language learning: to dedicate as an adjunct to the techniques of teaching of grammar and sound system of the new language. Game can be experience that gives meaning to form and sound.<sup>27</sup>

Many purpose of using game that have explained above, so that it can be concluded that for using words chain game is an alternative to help students have fun in learning vocabulary. The purpose of the game is to increase and develop the students' vocabulary knowledge.

### c. The Steps of playing Word Chain Game

According to Rini, the steps of Word Chain game as follow:

- a. Determine the category of the word you will play. For example:  
Fruit
- b. Point out one player to say one word about fruit. For example:  
Banana
- c. The next player should say the name of other fruit which begin with the last letter of the previous word. For example: Avocado
- d. Then, the third player said Orange and so on.
- e. The player that could not answer should out of the game.<sup>28</sup>

In addition, Rini illustrates some other steps to play word chain game. Rini use animal categories to play word chain game. Such as colors, shapes, characters. The researcher chose the three categories based on descriptive text material and vocabulary discussions that students have not fully understand in their class. The step as follow:

<sup>27</sup> Gretchen E. Weed, *Using Games in Teaching Children*, (Tokyo), p. 303

<sup>28</sup> Ayu Rini, *Excellent English Game*. (Jakarta: kesaint Blanc, 2008)

- 1) The students are divided into several groups. The distribution of groups should be fairly. Such as there are 30 students so the teacher will make five groups. Where in a group there are 6 students.
- 2) Choose the word category, for example: Color.
- 3) First player can use the word like Grey, and then he/she one of the other players to say the other name of color which begin with the last letter of the previous related.
- 4) “Y” as the last letter of word “Yellow” will be the first letter of the next name of color. The next player may be say the word “White”. Then, he/she asks the other players to say the other color name, where the initial name of the color is “E”. “E” is the last letter of the word “White”.
- 5) The player will be come out of the game if she/he cannot give the right answer. And the game will continue with the new category, such as Shapes, Characters, etc.<sup>29</sup> The words chain will be like the following example:

First player : Grey

Second player : Yellow

Third player : White

Fourth player : Emerald

Fifth player : Denim

Sixth player : Maroon

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<sup>29</sup> Ayu Rini Popular English Game, Belajar bahasa Inggris dengan menyenangkan. (Jakarta: Pustaka Mina, 2008)

Seventh player: Navy, etc.

Variations: Whole-Class Word Chains:

1. Everyone in the class has a sheet of paper of the same size and writes a word on it at the same time.
2. When everyone is ready, each player passes his or her paper to the closets player. Each player writes a word starting with the last letter of the word on the sheet of paper he or she received. Then, when everyone's ready, they pass the papers on again.
3. This goes on until the players get their own sheet of paper back.

Based on the theories above, it can be concluded that the word chain game is the game that is played by using the last letter of the previous word to create a new word.

#### **d. The advantages of Word Chain Game**

There is some experts' statement dealing about the advantages of word chain game. Among them is Carroll, he states that word chain is a kind of game purposing to improve the players' ability in mastering vocabulary or words. According to Hemscott as cited by M. Fadhly Farhy Abbas that said states that, "it is also an aid to spelling, playing word games help create an interest in words and their spelling."<sup>30</sup>

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<sup>30</sup> M. Fadhly Farhy Abbas, p. 46.



Referring to the experts' statement above, it can be concluded that there are many advantages of word chain game, among them is to allow students to: work co-operatively, compete with each other, strategize, think in a different way, compare and share knowledge, learn from others, learn from mistakes, work in a less stressful and more productive environment, and allow people to have fun. And also other the benefit of word chain game is to improve the players' ability in mastering vocabulary or words.

**e. The Disadvantages of Word Chain Game**

The game cannot be successfully applied when the teacher cannot set the class. This game is needs high concentrate, focus, and understanding of the test, because there are many clues to help the students in working on the word chain when they can't do this word chain game well. There will be many blanks in word chain game, thus the students can't improve their vocabulary.

**B. Theoretical Framework**

Theoretical framework is a concept in the theory can be related with the factors which are identified as the important problem. The thesis is quasi experimental research the theories descriptions are:

X : Word Chain Game

Y : Vocabulary Mastery

In this study, the researcher tries to help students explore their vocabulary mastery by applying word chain game. The researcher uses word chain game as a technique game in vocabulary. The researcher hopes by using word chain game technique, student's vocabulary mastery will be better than before.

### **C. Previous Research Finding**

Some researcher has linked some relevant studies. It could be references of researcher to help this study in the term of vocabulary and games. The first previous study was conducted by Izzah Zahrotul from Muhammadiyah University of Purwokerto. The title *The Use of Word Chain Game to improve Vocabulary Mastery of The Eight Grade Students at SMPN 3 Kalibagor*. The purpose of the study was to improve students' vocabulary mastery in eight grade (8A) students as SMPN 3 Kalibagor through word chain game. This research used a classroom action research (CAR). The researcher used Kemmis and Mc Taggart design. There were two cycles in this research and in each cycle, researcher did 2 actions. The subjects of the research were the students of class VII A in SMAN 3 Kalibagor academic year 2014/2015. There were 30 students in it, 16 males and 14 females. To collect the data the researcher used a test: questionnaire, and observation as the technique of collecting data of this research. This research applied word chain game in every cycle. The passing grade (KKM) in this research was 75. The average result of the students' score in cycle I was 64.4 and cycle II was 76.1. The result of the study showed that the used of word chain game could

improve the students' vocabulary mastery in English teaching learning process. The students were happier when following the teaching learning process of going on. The actively interacted each other and follow the teaching learning process enthusiastically.<sup>31</sup>

The another second researcher is Umi Sulusiatun Nikmah. She conducted a study entitled *The Use of Word Chain Game to Improve the Fourth grade Students' Vocabulary Ability at SDN 2 Kerjo in Academic Year 2010/2011*. The sample of the study was fourth year student of SDN 2 Kerjo. She used classroom action research (CAR) as the method of the study which used two cycles. The result showed that there was an improvement of the students' vocabulary ability by using word chain game. It was showed by the increasing score 66.7% from cycle 1 and score 90.5% from cycle 2.<sup>32</sup>

Lastly, from Hari Supriyatna has analyzed and conducted *The Effectiveness of Guessing Game Technique in Teaching Vocabulary at the MTs Darussalam (An Experiment Study at The Second Grade of MTs Darussalam Academic Year 2013/2014)*. The purpose of this research is to gain the information about is the usage of guessing game technique for teaching vocabulary at the second grade of MTs Darussalam. He concluded that teaching the vocabulary by using guessing game technique has a

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<sup>31</sup> Izzah Zahrotul, Muhammadiyah University of Purwekorto. *The Use of Word Chain Game to Improve Vocabulary Mastery of The Eight Grade Students at SMPN 3 Kalibagor*, Retrieved on Desember 10<sup>th</sup> 2019 at 09.00 from [repository.ump.ac.id/46/](http://repository.ump.ac.id/46/)

<sup>32</sup> Umi Sulusiatun Nikmah, *The Use of Word Chain Game to Improve the Fourth grade Students' Vocabulary Ability at SDN 2 Kerjo in Academic Year 2010/2011*, Retrieved on Desember 10<sup>th</sup> 2019 at 09.00 from [repo.iain-tulungagung.ac.id/133/](http://repo.iain-tulungagung.ac.id/133/)

significant influence and more effective than only using memorizing method. It is mean games more interesting.<sup>33</sup>

There is a difference that is presented from the three researchers in previous research on the media selection and the class that will be incorporated in one class. It can be seen from selecting appropriate of media and technique can be implemented in improving and sharpening the students' vocabulary knowledge. This study will focus on the word chain game that will be realized at junior high school with seventh grade students as the participants to know whether the word chain game can affect students' vocabulary when they are learning English. In this research, the researcher focused on the effect of word chain game on students' vocabulary mastery in learning English. This research was taken a place at the seventh grade in SMP Ma'arif 1 Ponorogo.

#### **D. Hypothesis**

There are two hypotheses offered in this study, there are:

Ho : the mean score of the vocabulary test scores for the students who are taught using word chain game is not significantly higher than for the students who are taught without using word chain game.

Ha : the mean score of the vocabulary test scores for the students who are taught using word chain game is significantly higher than that for the students who are taught without using word chain.

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<sup>33</sup> Hari Supriyatna, *The Effectiveness of Guessing Game Technique in Teaching Vocabulary at MTs Darussalam (An Experimental Study at the Second Grade of MTs Darussalam Academic Year 2013/2014)*, Retrieved on Desember 10<sup>th</sup> 2019 at 10.00 from repository.uinjkt.ac.id

## CHAPTER III

### RESEARCH METHODS

In this chapter the researcher methods, the researcher discusses about research design, population and sample, instrument of data collection and the technique of data collection.

#### A. Research Design

The Quantitative approach is taken and used by researcher in this research. That means this approach is used as a tool to test and check the objective theories through relationships between variables. These variables can be measured, characterized as instruments, so that numbered data can be analyzed using statistical procedures.<sup>34</sup> The quantitative approach was categorized by the collection of information which can be analyzed numerically, the results of which are typically presented using statistics, tables, and graphs.<sup>35</sup> The intent of the quantitative method is to know and test pre-determined the result of hypotheses and also produces general results.<sup>36</sup> On the design of this study, the researcher used the experimental research.

The basic purpose of the experimental design is to test and know the impact of the treatment results done in the final result and organized all other

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<sup>34</sup> John W. Creswell. *Research design: Qualitative, Quantitative, and Mixed Methods Approach*. (USA: SAGE Publications, INC., 2009),4.

<sup>35</sup> ACAPS, *Qualitative and Quantitative Research Techniques for Humanitarian Needs Assessment*, (New York: ACAPS Better Assessment Better Aid, 2012), p. 4.

<sup>36</sup> *Ibid.* p. 5.

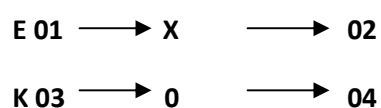
factors that influence it.<sup>37</sup> The method used in this study was quasi-experimental. Quasi experiment is one type of experimental research in which researchers do not randomize (randomness) in determining the subject of the research group, but the results achieved are significant, both in terms of internal and external validity.<sup>38</sup> Therefore, this study tried to analyze effect of one variable on another variable, one of which is a controlled variable.

This research had two variables that are independent variable and dependent variable and also used non-equivalent (pre-test and post-test) group control design. The research design was followed:<sup>39</sup>

Independent variable : word chain game

Dependent variable : vocabulary mastery

The research design is as follows:



Notes:

E : Experimental class (the students who are taught use word chain game)

K : Control class (the students who are taught not use word chain game)

01 : The experimental class for pre-test

<sup>37</sup> Creswell. *Research design*, 145-146.

<sup>38</sup> A. Muri Yusuf, *Metode Penelitian: Kuantitatif, Kualitatif & Penelitian Gabungan*. (Jakarta: Prenadamedia group, 2013), p. 78.

<sup>39</sup> Donald Ary, et al. *introduction to Research in Education Eighth Edition*, (Wadsworth: Compag Learning, 2010), 316.

- 02 : The control class for pre-test
- X : Treatment
- 02 : The experimental class for post-test
- 04 : The control class for pos-test

Referring to the research design above, it could be seen that the research had two classes; they were experiment and control class. In the experiment class will be given treatment using word chain game while the control class will be taught with ordinary technique. Before performing the treatment of students will be given pre-test first to strengthen the mastery of vocabulary and post-test after treatment to know the effect of the treatment.

## **B. Population And Sample**

### **1. Population**

A population is defined as a small member of any well-defined class of people, events, or objects.<sup>40</sup> And can be defined as well as boundary that has a particular trait that has allows researchers to draw conclusions from that circumstances.<sup>41</sup> According to Borg, W. R., Gall, M.D, in educational research usually is defined as all the members of a real or hypothetical set of people, events, or subject to which educational researchers wish to generalize the result of the research.<sup>42</sup>

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<sup>40</sup> Donald Ary, et al. Introduction to Research in Education Eighth Edition, (Wadsworth: Compage Learning, 2010), 148.

<sup>41</sup> Muri Yusuf, 146.

<sup>42</sup> Muhammad Adnan Latief, Research Method on Language Learning: an Introduction. (Malang: UM Press, 2013), 181.

Based on the several definitions, it can be conclude that population is the whole subject of research in the form of people, events or objects that have certain characteristics that by researcher needed to be reviewed, studied and deduced.

The population in this research was taken from the seventh grade students' of SMP Ma'arif 1 Ponorogo. The seventh grade students of SMP Ma'arif 1 Ponorogo consist of 5 classes: VII A, VII B, VII C, VII D, and VII E in academic years 2019/2020. The total of population is 110 students. The researcher chose two classes as control and experimental class.

## 2. Sample

The sample is a limited part of the total population which is used to estimate the population that can be taken specifically.<sup>43</sup> When dealing with people, it can be intended as a group of respondents who choosed from a large population with the purpose of the survey.<sup>44</sup> Charles, C.M states a sample as a small group of people selected from a larger population to represent the entire population which it is taken.<sup>45</sup> Sample is used to find groups from a small part of the population. This is a technique in determining the type of cluster random sampling. Cluster random sampling is based as a researcher technique in dividing the

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<sup>43</sup> Judy Webster, *Introduction to Research in England and Wales*, (1985).

<sup>44</sup> Kultur Singh, *Qualitative Social Research Methods*, (New Delhi: Sage Publication India Pvt Ltd, 2007), 88

<sup>45</sup> Mohammad Adnan Latief, *Research Methods on Language Learning an Introduction*.



sample into several groups (seen from the visible and easily identifiable characteristic).<sup>46</sup>

Referring to the described above, the researcher choosed a sample of two classes with the same level of knowledge. The researcher used class VII B and VII C at SMP Ma'arif 1 Ponorogo in academic year 2019/2020 as an experimental and control class. Each class consists of 22 and 21 students. VII B indicated as a control class which is not taught by using word chain game and VII C indicated as an experiment class which is taught by using word chain game.

### **C. Instrument Of Data Collection**

The instrument of data collection is the choosed equipment the researcher to collect data to be easier and tidy. The data means evidences or observations. In scientific research in the world of education, data should be having several tools or instruments that are designed by themselves and are standardized.<sup>47</sup>

Primary data in a research instrument is created through a test based on the standard procedure test by researcher. The test is divided into two parts, that are pre-test and post-test. The pre-test was given before treatment while post-test was given after treatment. Pre-test was done to obtain the achievement of student learning outcomes before doing treatment as the

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<sup>46</sup> Ranjit Kumar, *Research Methodology a Step-by-Step Guide for Beginners* (London, SAGE Publications Ltd, 2011), 187

<sup>47</sup> Yongesh Kumar Singh. *Fundamental of Research Methodology and Statistic*. (New Age International. New Delhi. 2006), 213.

teaching process. And post-test was done to obtain the achievement of student learning outcomes after finishing the teaching process.

This study, the researcher used a test related to vocabulary which it has been prepared by the teacher to know the impact of word chain game. There were 20 multiple choice items for the test.<sup>48</sup> The test can estimate the ability of student in mastering the vocabulary that is previously taught by the teacher.

Based on the instrument of data collection, the researcher used forty item tests to be applied to the students. In scoring the students' work, the researcher using as follows':

1. The 1 score was indicated if the test is answered correctly by the students.
2. The 0 score was indicated if the test is answered incorrectly by the students.

A good instrument must comply two important regulations of test that are validity and reliability in opinion Suharsimi Arikunto.<sup>49</sup>

### **1. Validity Test**

The test of the validity here is aiming to measure how much the results are known to be in accordance with the step requirements in the study.<sup>50</sup> Validity test is defined as a test to measure what is claimed, or intended, to measure. There are three main strategies exist for investigating the validity of a test: content validity, construct validity, and

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<sup>48</sup> See Appendix 2

<sup>49</sup> Suharsimi Arikunto, *Prosedur Penelitian* (Jakarta: Rineka Cipta, 2013), 211.

<sup>50</sup> H. Douglas Brown, *Language Assessment Principle and Classroom Practice* (New York, Logman, 2000), 22

criterion-related validity. Likewise NRT and CRT are different in analysis results. NRTs are designed to produce a normal distribution with relatively high variance among the scores. In contrast, CTRs are designed to measure what has been learned and therefore cannot be expected to necessarily produce variance among scores (for example, if all the students know all the material).<sup>51</sup> Test is said to be valid if the results match the criteria. This technique used is Pearson. The focus of validity does not refer to the instrument only, but also the interpretation and score results on the instrument itself.<sup>52</sup> Content validity should be reached as a requirement of a proper and right measurement.

In this research, the researcher used SPSS 16.0 to measure the validity. The analyzed is used to determine the  $r_{xy}$ , the defined with  $r_{table}$  with 5% significance level for product moment with df or db is  $n-r$ ;  $20-2=18$ . According to Sugiyono,  $r_{table}$  value for  $N=18$  on the 5% significance level, it listed 0,4438. It means that  $r$  index is 0,4438. It can be concluded that the  $r_{xy}$  value is bigger than the  $r_{table}$  value indicating the item is valid. In contrast, if the value of  $r_{xy}$  is smaller than the value of  $r_{table}$ , it indicated the item is invalid.

On this validity and reliability test, the researcher took a sample of 20 respondents for 40 item of vocabulary test. From the existing validity

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<sup>51</sup> James Dean Brown, *Testing in Language Program* (New York: McGraw-Hill ELS/ELT, 2005), 232

<sup>52</sup> Donald Ary, et al *Introduction to Research in Education Eight EDITION*, (Wadsworth: Compag Learning, 2010). 236.

calculations of the 40 vocabulary test items only 15 items were valid. The result of the test validity can be seen as follow:

**Table 3.1**  
**The Results of Validity Statistical Calculation**

No	$r_{table}$	$r_{xy}$	Criteria
1.	0,443	0,638	Valid
2.	0,443	0,100	Invalid
3.	0,443	0,648	Valid
4.	0,443	0,225	Invalid
5.	0,443	0,680	Valid
6.	0,443	0,288	Invalid
7.	0,443	0,252	Invalid
8.	0,443	-0,547	Invalid
9.	0,443	0,023	Invalid
10.	0,443	0,186	Invalid
11.	0,443	0,488	Valid
12.	0,443	0,536	Valid
13.	0,443	0,423	Invalid
14.	0,443	0,527	Valid
15.	0,443	0,699	Valid
16.	0,443	#DIV/0	Invalid
17.	0,443	0,175	Invalid
18.	0,443	0,241	Invalid
19.	0,443	0,041	Invalid
20.	0,443	-0,176	Invalid
21.	0,443	-0,126	Invalid
22.	0,443	-0,325	Invalid
23.	0,443	0,786	Valid
24.	0,443	0,465	Valid
25.	0,443	0,505	Valid
26.	0,443	0,256	Invalid
27.	0,443	0,254	Invalid
28.	0,443	-0,243	Invalid
29.	0,443	0,112	Invalid
30.	0,443	0,461	Valid
31.	0,443	0,219	Invalid
32.	0,443	0,604	Valid
33.	0,443	0,425	Invalid
34.	0,443	0,584	Valid
35.	0,443	0,153	Invalid

No	$r_{table}$	$r_{xy}$	Criteria
36.	0,443	0,147	Invalid
37.	0,443	0,422	Invalid
38.	0,443	0,483	Valid
39.	0,443	0,555	Valid
40.	0,443	-0,033	Invalid

According to the table above, it can be demonstrated among 40 questions, there are 15 questions was valid and 25 questions invalid. Furthermore, the researcher too used 40 questions to revise the test in collecting data.

## 2. Reliability Test

A reliable test is dependable and consistent.<sup>53</sup> Reliability is the level where the test can be tested consistently through whatever it is measure. Reliability indicates that there are individual differences in test scores due to different errors by chance.

Reliability test aims to make the data produced more accurate. In this case, the researcher used an instrument test. The accuracy of the research data is not only seen from the validity test but also through reliability testing. Reliability measurement uses SPSS 16.0 for windows by using reliability analysis.

**Table 3.2**  
**'The Result of Reliability Statistical Calculation'**

Cronbach's Alpha	N of Items
.705	40

<sup>53</sup> H. Douglas Brown, *Language Assessment Principle and Classroom Practice*. (New York, Logman, 2000), 20

Based on the calculation above, it was found that Cronbach's Alpha value is 0,705. The reliability value is explained by the table "r" at the 5% significance level. The value of "r" table is 0,443. Because the value of "r" index reliability is  $0,705 > 0,443$ . This result was included in the reliable level that was acceptable.

#### **D. The Technique Of Data Collection**

In this quantitative research study, there are various types of techniques in collecting data. But here, the researcher only used test and documentation.

##### **1. Test**

According to H. Douglas Brown, test is a method to measure the ability and knowledge of people or performance people within a particular scope.<sup>54</sup> The test is a technique in collecting data. In this study, the researcher used 2 types of test that are pre-test and post-test to be given in the experimental class group and control. Before the learning process is given pre-test to both groups to be sure that both have the same level of proficiency and equivalent. The post test is given after being taught by using word chain game to the experimental group. The multiple choice test is used as objective data toward students' vocabulary mastery by using word chain game.

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<sup>54</sup> H. Douglas Brown, *Language Assessment Principle and Classroom Practices* (San Fransisco: Person Longman, 2003), 3.

## 2. Documentation

Documentation is one of way to get data or information. In this study, the role of documents is used to obtain of data including teacher lesson plan, the students score, and photograph during teaching learning process. Besides that, the researcher also gets the history of the school, vision, mission, goals, infrastructures, and the structure of organization of SMP Ma'arif 1 Ponorogo.

### E. Technique Data Of Data Analysis

The researcher used comparative technique to analyze the data. In this analysis, the researcher applies the quasi experiment to compare the mean score of control that is taught by using word chain game with which is taught by conventional method. The technique is useful to prove statistically result from the experimental class and control class whether it will be different or not. The researcher used the T-test to find data in determining significant differences between the experimental class and control class. Before using T-test to find the statistical result, the researcher will use Normality test and Homogeneity Test first.

#### 1. Normality Test

The normality test shows that the data in each variable comes from a normally distributed population.<sup>55</sup> As for at this stage the researcher uses a tool that is using SPSS 16.0 for windows by using Kolmogorov-

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<sup>55</sup> Andhita Dessy Wulansari, *Aplikasi Statistika Parametrik dalam Penelitian* (Yogyakarta: Pustaka Felicha, 2016), 94.

Smirnof in the asymp section. Sig (2-tailed). At this stage there are two criteria, namely:

- 1) When the asymp value. Sig (2-tailed) > 0, 05 the data is normally distributed.
- 2) When the asymp value. Sig (2-tailed) < 0, 05 the data is not normally distributed.

## 2. Homogeneity Test

Homogeneity test assumes that each variable's data has homogeneous variance with data on other variables.<sup>56</sup> At this stage using one way anova. At this stage there are two criteria, namely:

- 1) If the significance value is > 0, 05 it means homogeneous.
- 2) If the significance value is < 0, 05 it means not homogeneous.

## 3. Analyzing Data Using T-test

After testing of normality and homogeneity test were carried out, the researcher continued to analyze the data using T-test. T-test one of the statistical tests used to state that between two mean samples taken randomly from the same population have no significant differences.<sup>57</sup> In this test, which is analyzed is the comparasion between the experimental class score and the control class on pre-test and post-test.

In this research, the researcher used SPSS 16.0 to compute the T value or using T-test formula as a follow:

$$t_0 = \frac{M_1 - M_2}{SE_{M_1 - M_2}}$$

<sup>56</sup> Wulansari, *Aplikasi Statistika Parametrik dalam Penelitian*, 38.

<sup>57</sup> Retno Widyanigrum, *Statistika*. (Yogyakarta: Pustaka Felicha, 2017), 151.



$t_0$  = The value of “t observe”

$M_1$  = Mean of the difference of experimental class

$M_2$  = Mean of the difference of controlled class

$SE_{M1}$  = Standard error of experimental class

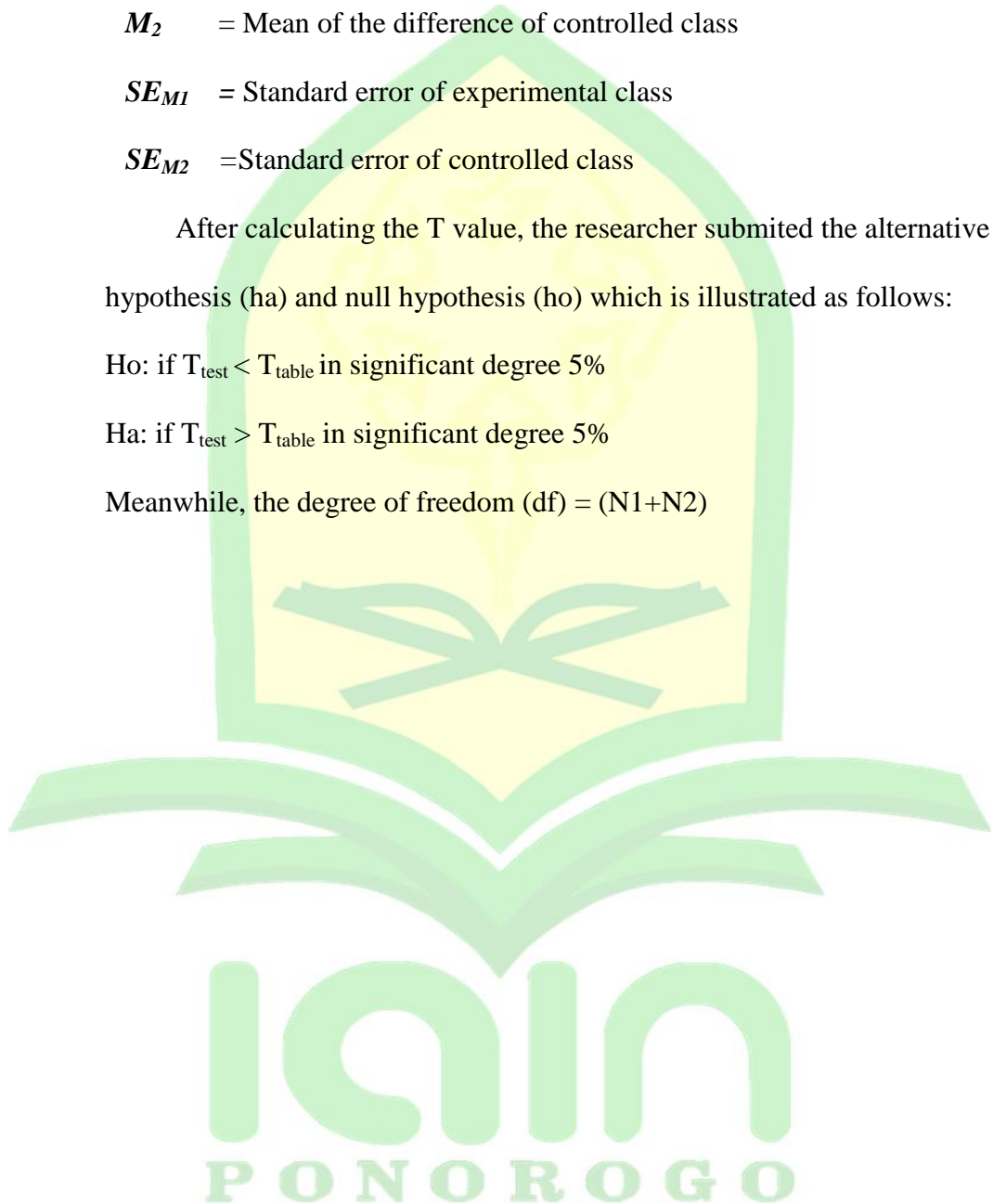
$SE_{M2}$  = Standard error of controlled class

After calculating the T value, the researcher submitted the alternative hypothesis ( $h_a$ ) and null hypothesis ( $h_0$ ) which is illustrated as follows:

$H_0$ : if  $T_{test} < T_{table}$  in significant degree 5%

$H_a$ : if  $T_{test} > T_{table}$  in significant degree 5%

Meanwhile, the degree of freedom ( $df$ ) =  $(N_1 + N_2)$



## CHAPTER IV

### RESEARCH FINDING

In this chapter, the researcher discusses about data description, data analysis, discussion and interpretation.

#### **A. Data Description**

In this study, the researcher used the quasi experimental research to find a concrete data which the researcher took two classes as sample to be observed. Then they were given material using different media to discover an effective strategy in teaching for the long term. The researcher took the seventh grade of SMP Ma'arif 1 Ponorogo as population. And two class as sample, VII B as experimental class and VII C as control class. The total number of students from both classes are 43.

In experimental class, the students were taught by using word chain game. Meanwhile, in control class the students were not taught by word chain game, but by lecturing or conventional strategy. At the last of study, the researcher wanted to compared between students post test control class and experimental class after using word chain game and ordinary technique.

## 1. Time of Research

This research was conducted from March, 11<sup>th</sup> to March, 14<sup>th</sup>. The schedule for experimental and control class can be seen in the table below:

**Table 4.1**  
**Experiment and Control Class Schedule**

Date	Activities
March , 11 <sup>th</sup> 2020	Pre test
March, 12 <sup>nd</sup> 2020	Treatment 1
March, 13 <sup>th</sup> 2020	Treatment 2
March, 14 <sup>th</sup> 2020	Post test

For pre-test and post-test, there are 15 similar items of test. The type of test is multiple choices. In assessment of the criteria can be seen on the discussion above.

## 2. The Procedure of Experimental Class

In the experimental class, the researcher used word chain game in the learning process. This learning process was done in a set of the learning process involved in this study as pre-test, first treatment, second treatment, and post-test. The activities can be described as follows:

The First meeting, the researcher gave pre-test for students before beginning the research. It was held on March, 11<sup>th</sup> 2020. There were 15 multiple choice items by took 40 minutes to completed.

The second meeting, the first treatment of word chain game held on March, 12<sup>nd</sup> 2020. The students are divided into several groups and it is division must be fair. Such as there are 21 students so teacher will make three groups. And where in a group there are 7 students. Choose

the word category, for example fruit. First player can use example the word of Banana, and then he/she one of the other players to say the other name of fruit which begin with the last letter of the previous related. "A" as the last letter of word "Avocado" will be the first letter of the next name of fruit. The next player may be say the word "Orange". Then, he/she asks the other players to say the other fruit name, where the initial name of the fruit is "E". "E" is the last letter of the word "Orange". The player will be come out of the game if he/she cannot answer correctly. And the game will continue with the other different new category.

The third meeting, the second treatment of word chain game held on March, 13<sup>th</sup> 2020. The material word category was color or new word category has never been taught. The second treatment activity was same as with the first treatment.

The fourth meeting, the researcher gave post-test. It was held on March, 14<sup>th</sup> 2020. It was conducted measure whether word chain game was success or not in teaching vocabulary.

### **3. The Procedure of Control Class**

The implementation control class procedure and material was the same as the experiment class. There are pre-test, first treatment and second treatment, and post-test. In control class the teacher taught using ordinary technique. But, it was not a new technique in learning process. This technique focuses on students, the teacher provides descriptive text

and then the students are instructed to look for difficult vocabulary. After completion then discussed together.

Firstly, the students will be given pre-test before beginning the research. It was held on March, 11<sup>th</sup> 2020. There were 15 multiple choice items by took 40 minutes to finishing. The secondly, the students will be given first treatment. It was held on March, 12<sup>nd</sup> 2020. The material in control class was same with the experimental class. But, in here the teacher only gives text containing paragraph. After that, the students were ordered to search for difficult words. The thirdly, it held on March, 13<sup>th</sup> 2020. The second treatment in control class taught with the ordinary technique. The material in the second treatment was same with experimental class. The second treatment activity was same as with the first treatment in control class. The fourthly, that was post-test. It was held on March, 14<sup>th</sup> 2020. It used to get the final score in control class.

#### **4. The Results of Students' Pre-Test and Post-Test in Experimental Class**

The table below showed the result of pre-test and post-test in experimental class for student who taught by using word chain game.

**Table 4.2**  
**The result of students' pre-test and post-test in Experiment Class**

No	Name	Pre-test	Post-test
1.	FTA	80	93
2.	LBP	73	86
3.	MRTH	66	86
4.	MFL	80	86

5.	MANS	80	93
6.	MRANA	73	80
7.	MRSN	73	86
8.	RF	80	86
9.	RSY	73	93
10.	RDC	80	86
11.	AAA	93	100
12.	ANA	80	93
13.	AZSN	86	100
14.	ANKA	66	73
15.	EAP	73	80
16.	NMK	73	86
17.	NHMP	80	86
18.	PNC	86	93
19.	SAMR	66	80
20.	SDA	86	93
21.	ZRK	80	86
	<b>TOTAL</b>	1627	1845
	<b>MEAN</b>	77,48	87,86

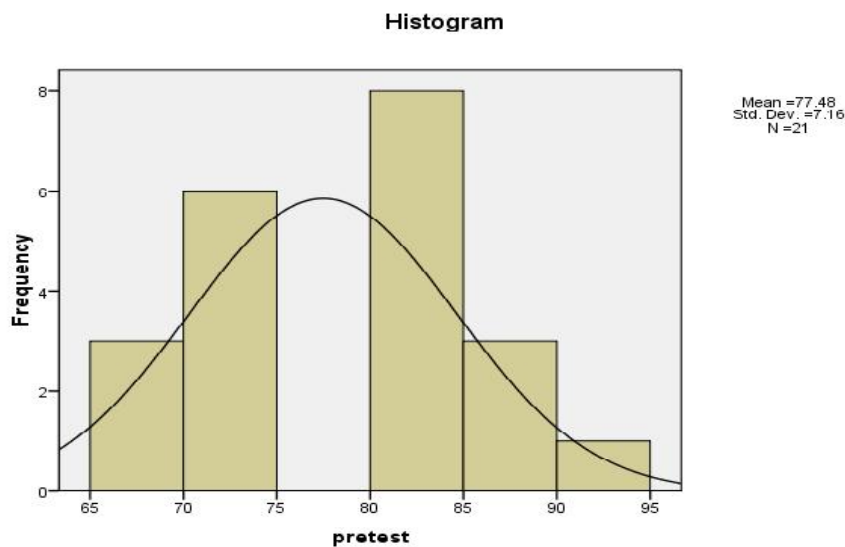
The table of data above showed the highest and the lowest pre-test scores students' of experimental class. It can be seen that the highest score in the pre-test was 93 and the lowest score was 66. The total of pre-test score was 1627. Meanwhile, the highest score in the post-test of experimental class was 100. The lowest score post-test for experimental class score was 73. The total of experimental class score was 1845.

**Table 4.3**  
**Frequency distribution of pre-test in experimental class**

Experiment					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	66	3	14,3	14,3	14,3
	73	6	28,6	28,6	42,9

	80	8	38,1	38,1	81,0
	86	3	14,3	14,3	95,2
	93	1	4,8	4,8	100,0
	Total	21	100,0	100,0	

On the table distribution above, it could be concluded that the score of students' vocabulary mastery are various. There were 14.3 % for 3 students obtained score 66, 28.6 % for 6 students obtained score 73, 38.1 % for 8 students obtained score 80, 14.3 % for 3 students obtained score 86, 4.8 % for 1 student obtained score 93.



**Figure 4.1 Histogram of pre-test in experimental class**

On the histogram above, it is described that  $M = 77.48$  and  $SD = 7.16$ . To specify the category of students' vocabulary mastery was good, medium, or low, the researcher classified scores using the standard as follows:

1. More than  $M+1SD$  ( $77.48+7.16 = 85$ ) was categorized into good.
2. Between  $M-1SD$  ( $77.48-7.16 = 70$ ) was categorized into medium.
3. Less than  $M-1SD$  ( $77.48-7.16 = 70$ ) was categorized into low.

That categorization can be seen clearly in the following table.

**Table 4.4**  
**The categorization of students' pre-test in experimental class**

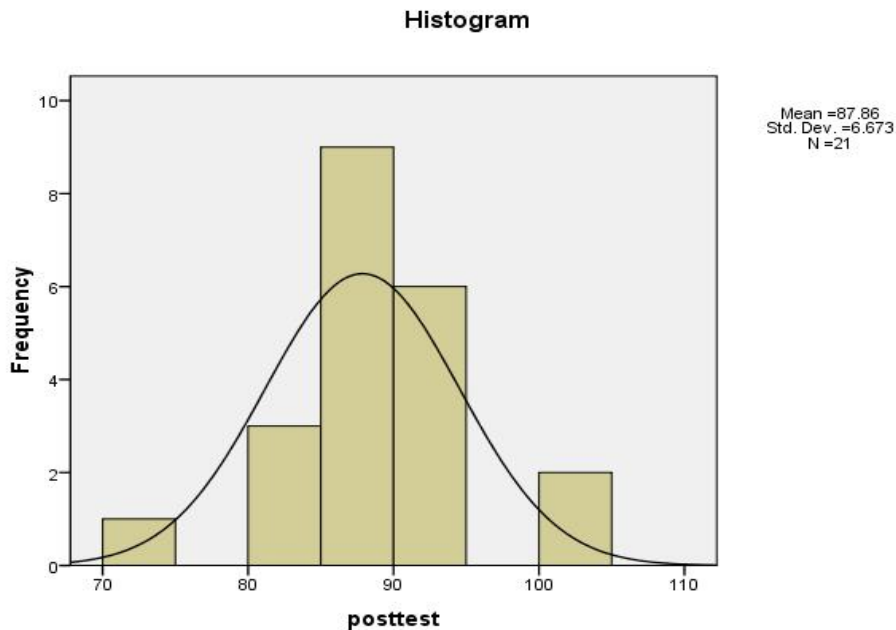
No	Score	Frequency	Percentage	Category
1.	More than 85	4	19,0 %	Good
2.	Between 70-85	14	66,7 %	Medium
3.	Less than 70	3	14,3 %	Low

**Table 4.5**  
**Frequency distribution of post-test in experiment class**

Experiment					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	73	1	4.8	4.8	4.8
	80	3	14.3	14.3	19.0
	86	9	42.9	42.9	61.9
	93	6	28.6	28.6	90.5
	100	2	9.5	9.5	100.0
	Total	21	100.0	100.0	

From the table frequency distribution above, it could be concluded that the score of students' vocabulary mastery are various. There were 4.8 % for 1 student obtained score 73, 14.3 % for 3 students obtained score 80, 42.9 % for 9 students obtained score 86, 28.6 % for 6 students obtained score 93, 9.5 % for 2 students obtained score 100.





**Figure 4.2 Histogram of post-test in experimental class**

From the table above, it described that  $M = 87.86$  and  $SD = 6.673$ .

To specify the category of students' vocabulary mastery was good, medium, or low, the researcher classified scores using the standard as follows:

1. More than  $M + 1SD$  ( $87.86 + 6.673 = 95$ ) was categorized into good.
2. Between  $M - 1SD$  ( $87.86 - 6.673 = 81$ ) was categorized into medium.
3. Less than  $M - 1SD$  ( $87.86 - 6.678 = 81$ ) was categorized into low.

That categorization can be seen in the following table:

**Table 4.6**  
**The categorization' of students' post-test in**  
**Experimental class**

No	Score	Frequency	Percentage	Category
1.	More than 95	2	9,5 %	Good
2.	Between 81-95	15	71,4 %	Medium
3.	Less than 81	4	19,0 %	Low

## 5. The Result of Students' Pre-Test and Post-Test in Control Class

The table below demonstrated the result of students' vocabulary mastery for the students are taught by using conventional or traditional technique (control class) or not using word chain game. This table showed pre-test and post-test score.

**Table 4.7**  
**The result of students' pre-test and post-test in Control Class**

No	Name	Pre-test	Post-test
1.	AR	73	80
2.	BI	60	66
3.	FDH	66	80
4.	FTP	66	73
5.	HDR	80	86
6.	IDW	73	80
7.	MFAR	80	86
8.	MAA	66	80
9.	MEA	73	80
10.	MSM	73	73
11.	NN	80	86
12.	RIDP	73	80
13.	SBP	86	93
14.	TWA	66	80
15.	YIF	73	80
16.	ZAP	80	86
17.	AA	73	80
18.	ADP	66	80
19.	DR	86	93
20.	NA	53	73
21.	NFW	73	80
22.	ZNAW	80	86
	<b>TOTAL</b>	1599	1781
	<b>MEAN</b>	72,68	80,95

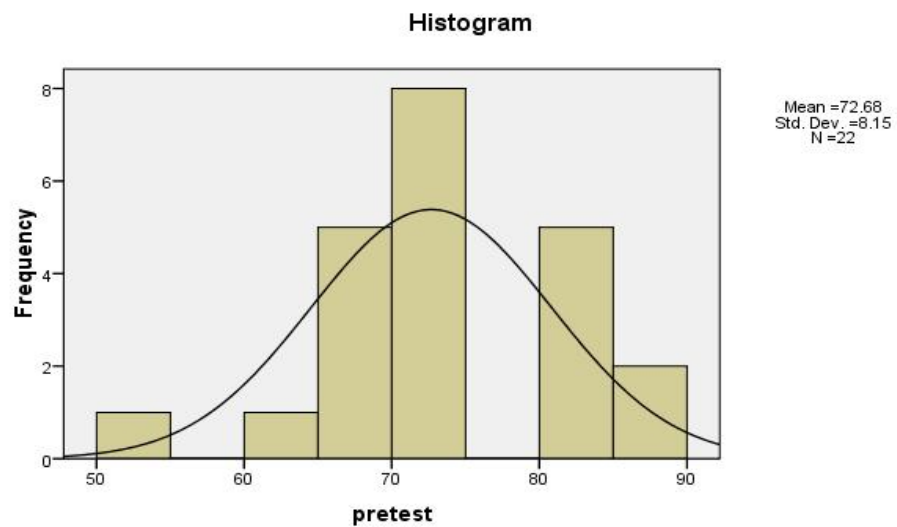
The table above showed the highest and the lowest pre-test scores students' of control class. It can be seen that the highest score in the pre-

test was 86 and the lowest score was 53. The total of pre-test score was 1599. Meanwhile, the highest score in the pos-test of control class was 93 and the lowest score was 66. The total of post-test score was 1781.

**Table 4.8**  
**'Frequency distribution of pre-test in control class'**

Control					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	53	1	4.5	4.5	4.5
	60	1	4.5	4.5	9.1
	66	5	22.7	22.7	31.8
	73	8	36.4	36.4	68.2
	80	5	22.7	22.7	90.9
	86	2	9.1	9.1	100.0
	Total	22	100.0	100.0	

On the table frequency distribution above, it could be concluded that the score of 'students' vocabulary mastery are various. There were 4.1% for 1 student obtained score 53, 4.5% for 1 student obtained score 60, 22.7% for 5 students obtained score 66, 36.4% for 8 students obtained score 73, 22.7% for 5 students obtained score 80, 9.1% for 2 students obtained score 86.



**Figure 4.3 Histogram of pre-test in control class**

From the histogram above, it described that  $M = 72.68$  and  $SD = 8.15$ . To specify the category of students' vocabulary mastery was good, medium, or low, the researcher classified scores using the standard as follows:

1. More than  $M + 1SD$  ( $72.68 + 8.15 = 80$ ) was categorized into good.
2. Between  $M - 1SD$  ( $72.68 - 8.15 = 65$ ) was categorized into medium.
3. Less than  $M - 1SD$  ( $72.68 - 8.15 = 65$ ) was categorized into low.

That categorization can be seen clearly in the following table:

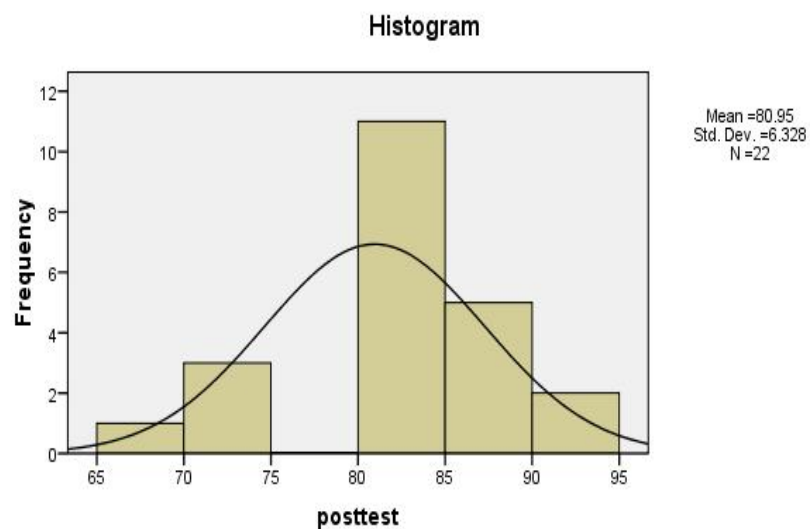
**Table 4.9**  
**The categorization of students' pre-test in control class**

No	Score	Frequency	Percentage	Category
1.	More than 80	7	31,8 %	Good
2.	Between 65-80	13	59,1 %	Medium
3.	Less than 65	2	9,1 %	Low

**Table 4.10**  
**Frequency distribution of post-test in control class**

Control					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	66	1	4.5	4.5	4.5
	73	3	13.6	13.6	18.2
	80	11	50.0	50.0	68.2
	86	5	22.7	22.7	90.9
	93	2	9.1	9.1	100.0
	Total	22	100.0	100.0	

On the table above, it could be concluded that the score of students' vocabulary mastery are various. There were 4.5% for 1 student obtained score 66, 13.6% for 3 students obtained score 73, 50.0% for 11 students obtained score 80, 22.7% for 5 students obtained score 86, 9.1% for 2 students obtained score 93.



**Figure 4.4**  
**Histogram of post-test in control class**

From the table above, it described that  $M= 80.95$  and  $SD= 6.325$ . To specify the category of students' vocabulary mastery was good, medium, or low, the researcher classified scores using the standard as follows:

1. More than  $M+1SD$  ( $80.95+6.325= 87$ ) was categorized into good.
2. Between  $M-1SD$  ( $80.95-6.325= 75$ ) was categorized into medium.
3. Less than  $M-1SD$  ( $80.95-6.325= 75$ ) was categorized into low.

That categorization can be seen clearly in the following table:

**Table 4.11**  
**The categorization of students' post-test in control class**

No	Score	Frequency	Percentage	Category
1.	More than 87	2	9,1 %	Good
2.	Between 75-87	16	72,7 %	Medium
3.	Less than 75	4	18,2 %	Low

## B. Data Analysis

The data had to fulfill the testing requirements before testing the hypothesis. Among them should be use several tests first, namely normality and homogeneity test of the data.

### 1. Normality

The normality test is a test used to determine whether the data are a normal distribution or not. To determine it, If the statistical value is lower than the Kolmogorov-Smirnov table value at a significant level of 5%, then the data is normally distributed. Conversely, if the statistical value is higher than the Kolmogorov-Smirnov table value at a significant level of 5%, the data is not normally distributed.

In this research, the researcher used Kolmogorov-Smirnov formula and the calculations were done by using SPSS 16.0 as follows:

**a. The Normality Test of Experimental Class**

**Table 4.12**

**One-Sample Kolmogorov-Smirnov Test**

		<b>Experimental Class</b>
N		21
Normal Parameters <sup>a</sup>	Mean	.0000000
	Std. Deviation	4.13977119
Most Extreme Differences	Absolute	.195
	Positive	.195
	Negative	-.086
Kolmogorov-Smirnov Z		.895
Asymp. Sig. (2-tailed)		.399

a. Test distribution is Normal.

Based on the Table 4.12 showed that asymp value. Sig. (2-tailed) of 0,399 > 0,05. It means that the data of experimental class was normal.

**b. The Normality Test of Control Class**

**Table 4.13**

**One-Sample Kolmogorov-Smirnov Test**

		<b>Control class</b>
N		22
Normal Parameters <sup>a</sup>	Mean	.0000000
	Std. Deviation	3.28487634
Most Extreme Differences	Absolute	.225
	Positive	.159
	Negative	-.225
Kolmogorov-Smirnov Z		1.055
Asymp. Sig. (2-tailed)		.215

a. Test distribution is Normal.

### One-Sample Kolmogorov-Smirnov Test

		Control class
N		22
Normal Parameters <sup>a</sup>	Mean	.0000000
	Std. Deviation	3.28487634
Most Differences	Extreme Absolute	.225
	Positive	.159
	Negative	-.225
Kolmogorov-Smirnov Z		1.055
Asymp. Sig. (2-tailed)		.215

Based on Table 4.13 was showed that asymp value. Sig. (2-tailed) of  $0,215 > 0,05$ . It means that the data of class was normal.

## 2. Homogeneity

Homogeneity test were used to determine whether a test was homogenous or not. It was important because the similarity of both groups would impact the result of test. The calculations were done by using SPSS 16.0 as following:

**Table 4.14**  
**The Homogeneity of Variance**

### Test of Homogeneity of Variance

	Levene Statistic	df1	df2	Sig.
Score Based on Mean	.366	1	41	.548
Based on Median	.208	1	41	.651
Based on Median and with adjusted df	.208	1	40.988	.651
Based on trimmed mean	.360	1	41	.552

Referring to calculation above can be showed that sig.  $0,552 > 0,05$ . It means that the data is homogeneity.



### 3. Testing Hypothesis

The researcher tested the data through T-test using SPSS 16.0 program to find out whether there was a significant difference or not. Before carrying out the T-test, the data should be normally distributed and homogeneous including the post-test of the experimental class and the control class. And then, the researcher conducted T-test calculation by using SPSS 16.0 program. The result of the calculation as follows:

**Table 4.15**  
**The Mean of score of experimental and control class**

#### Group Statistics

Group	N	Mean	Std. Deviation	Std. Error Mean
Score experimental class	21	87.8571	6.67297	1.45616
control class	22	80.9545	6.32815	1.34917

Referring to the table of data above, the result of data analysis showed that the Mean score of the experimental class was 87, 857 and the control class was 80, 9545. It means that the mean score of the experimental class was higher than the control class.

**Table 4.16**  
**The calculation of T-test**

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Score	Equal variances assumed	.366	.548	3.482	41	.001	6.90260	1.98260	2.89865	10.90655
	Equal variances not assumed			3.477	40.589	.001	6.90260	1.98511	2.89236	10.91284

From the table calculation of T-test above, it could be concluded that the value of  $t_{\text{test}}$  is 3,482 and the degree of freedom is 41. The value of significance 5% of  $t_{\text{table db}=41}$  is 2,019. To interpret the data above, the researcher formulates of hypothesis as follows:

Ha : there was significant effect of the use of word chain game on students' vocabulary mastery.

Ho : there was no significant effect of the use of word chain game on students' vocabulary mastery.

The result of the research concluded that the value of T-test is higher than  $T_{\text{table}}$  ( $3,482 > 2,019$ ). It means that Ha was accepted and Ho was rejected. It can be known that there was significant different score on vocabulary mastery who are taught by word chain game and those who are not.

### C. Discussion and Interpretation

From the computation above, it was showed that the difference coefficient of students taught using word chain game and the students not being taught using word chain game is 3,482. Hypothesis test ( $t_0$ ) at 3,482 from the calculation above would be compared with the "t" index ( $t_t$ ) with the condition stated below:

- 1) If the  $t_0 > t_t$  Ha was accepted. It means that there was significance between two variables.
- 2) If the  $t_0 > t_t$  Ha was refused. It means that there was no significance difference between two variables.

To determine the value of  $t_0$ , the researcher was checking df and consulted with the  $t_t$  score:

$$= (n_1+n_2)-2$$

$$= (21+22)-2$$

$$= 41$$

From the significant standard 5% the value of  $t_t$  was 2,019. Then the value of  $t_0$  is 3.482, so the results  $t_0 > t_t$ . it means that  $H_a$  was accepted and  $H_o$  was rejected.

The strategy used in this research is game. This word chain game technique affects students' vocabulary mastery. Mastery includes writing each spelling, classifying the form of the word and the meaning of the word. This game will foster students' interest in learning English because it is a game that is quite interesting and efficient. And able to improve students' cooperative way of thinking. In this game, students are required to be ready and fast in finding a vocabulary. The method that used memorization and drilling systems will make students feel depressed and afraid to learn, so they will think that English is scary. With this game strategy, students will not get bored easily and will be more active and productive in learning.

Referring to this statement, the researcher concluded that there was a significant different between students taught by using word chain game and students not taught by using word chain game. It intrepeted that the students which taught by using word chain game attain a better score in

vocabulary mastery. In other word, word chain game is quite effective in the learning process. It means that there was a significant different influence of using word chain game on student's vocabulary mastery.



## CHAPTER V

### CLOSING

In this chapter the researcher discusses about the conclusion and suggestions.

#### A. Conclusion

Based on the result of data calculation, the writer concluded that using word chain game has given positive effect on students' vocabulary mastery. The students who are taught using word chain game have a mean score better than the students who are not taught using word chain game. The atmosphere of experimental class also more active. They can learn the materials easily.

The result of this research in this study is the mean score of post-test from the experimental class is higher (87,85) than post test from control class (80,95). The conclusion can be seen from the result of statistical in the previous chapter, where the value of  $t_{\text{test}}$  is higher than  $t_{\text{table}}$  ( $3,482 > 2,019$ ). It has been found that the comparison value  $t_0$  between students who are taught using word chain game and who are not taught using word chain game is 3,482. This score is higher than "t" value in the table, which is  $t_t = 2,019$  at the level of significant 5%, with  $db = 41$ . So  $H_a$  is accepted. On the other hand, it can be concluded that the using of word chain game can enhance students' vocabulary mastery.

## **B. Suggestions**

Considering the conclusion above, the researcher would like to suggest:

### 1. For the teacher

So that students' interest in learning is increasing, especially in English language learning, teachers are expected to create a pleasant classroom atmosphere by creatively choosing method or technique that are suitable for students. So that when students will study in class they feel happy, and interest to understand what is conveyed by the teacher. And then teacher had to understand about the students' problem in teaching and learning.

### 2. For the students

The students are expected to focus more during the lesson. And students should have a high enthusiasm for learning and always improve themselves. So they are able to obtain satisfactory results.

### 3. For the readers

For the readers, the researchers hopes that the result of this study can be useful as a reference for a further research concerning with vocabulary mastery.

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