

**THE EFFECTIVENESS OF WORD CONNECTING GAME
ON STUDENTS' VOCABULARY MASTERY
AT GRADE VIII OF SMP NEGERI 1 SOOKO PONOROGO**

THESIS



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STATE ISLAMIC INSTITUTE OF PONOROGO**

2023

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THESIS

**Presented to State Islamic Institute of Ponorogo in Partial Fulfillment of the
Requirement for the Degree of Sarjana in
English Language Teaching Department**



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Day : Tuesday
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I, hereby declare that the submitted thesis is entirely my original work. Any assistance and sources used in the preparation of this thesis have been acknowledged and appropriately cited.

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I fully understand the gravity of the consequences of any form of academic dishonesty, plagiarism and I take full responsibility for the authenticity and originality of this thesis. I certify that all information presented in this work is accurate and based on research conducted by me.

Thank you for your attention to this matter.

Ponorogo, March 22th 2023

Sincerely,



Nimas Ayu Meta Kusuma Wardani

DEDICATION

With all praise to Allah SWT and also the support and prayers of loved ones, finally this thesis can be completed properly and on time. Therefore, with pride and joy, the researcher would like to thank and dedicate this thesis to:

1. My parents, Mr. Meseno and Mrs. Tarmiati, for their endless support, encouragement, sacrifices, and prayers for the sake of the researcher's success.
2. My dearest aunt, Lilik who always supports me and loves me like my own parent.
3. My loyal friend, Fadhilah Tri Wulandari who always supports me.
4. My best friends, Masruroh, Arina Mana Sikana and Mawar Sekar Ayu Rosita who always support, encourage and motivate me.
5. My comrades from class TBI-A who always support and motivate one another.



MOTTO

لَا يُكَلِّفُ اللَّهُ نَفْسًا إِلَّا وُسْعَهَا

“Allah does not burden a person but according to his ability.”

(Al-Baqarah: 286)¹



¹ Al-Qur'an, 3: 286.

ABSTRACT

Wardani, Nimas Ayu Meta Kusuma. 2023. *The Effectiveness of Word Connecting Game on Students' Vocabulary Mastery at Grade VIII of SMP Negeri 1 Sooko Ponorogo.* Thesis, English Education Department, Tarbiyah Faculty, State Institute for Islamic Studies of Ponorogo. Advisor Dr. Dhinuk Puspita Kirana, M.Pd.

Key Terms: vocabulary mastery, word connecting game, the effectiveness.

Vocabulary is an important aspect of learning English because vocabulary plays a role in all language skills, such as listening, speaking, reading and writing skill. Mastery of limited vocabulary can hinder students in developing language skills. Word Connecting Game is a vocabulary teaching strategy using games that can help students master more vocabulary.

This research describes about students' problem in vocabulary mastery. It was solved by choosing an appropriate game that is Word Connecting Game. There are several problems in this research: 1) The majority of the students have low interest in learning English, 2) Students have difficulty mastering the four English skills, 3) Students have little mastery of English vocabulary. The purpose of this research is to know whether there is the effect of Word Connecting Game to students' vocabulary mastery at grade VIII of SMP N 1 Sooko.

The method used in this research is experimental research. The population in this research were all class VIII students of SMP N 1 Sooko. The total population is 135 students. Then, the sample of this research were two classes, VIII-A as an experimental class consisting of 27 students and VIII-B as a control class consisting of 27 students. Data is collected through pre-test and post-test. To analyze the data, the researcher used the Paired Samples t-test formula with a significance level of 0,05.

Based on the calculation of the t-test, the researcher found that the t-test scores of the experimental class and the control class in the post-test were 0,000, which means less than 0,05 ($0,000 < 0,05$). Therefore, the researcher can conclude that "There is the significant effect of Word Connecting Game to students' vocabulary mastery at grade VIII SMP Negeri 1 Sooko".



ACKNOWLEDGEMENT

First of all, the researcher would like to say thanks and Alhamdulillah to Allah SWT who always leads and grants her blessing and mercy so that she is able to finish her thesis. Secondly, may Sholawat and Salam praise to our prophet Muhammad SAW, who has guided us from darkness to the Islamic era.

After a long struggle, the researcher finally can finish and present her thesis. The researcher realizes her studies would be impossible to finish without other peoples' help. Therefore, in this good occasion, the researcher would like to say thanks to:

1. Dr. Hj. Evi Muafiah, M.Ag., as Rector of State Institute of Islamic Studies Ponorogo.
2. Dr. H. Moh. Munir, Lc, M.Ag., as Dean of Tarbiyah and Teacher Training of State Institute of Islamic Studies Ponorogo.
3. Dr. Dhinuk Puspita Kirana, M.Pd., as the Head of English Education Department of State Institute of Islamic Studies Ponorogo, and also as the advisor who has been patience and sincere in guiding the researcher in the process of working on this thesis.
4. Mr. Suhadi, M.Pd., as the headmaster of SMP Negeri 1 Sooko who has supported and given permission to researchers to conduct research.
5. Mrs. S. Retno Pratiwi, S.Pd., as an English teacher for class VIIIA and VIIIB of SMP Negeri 1 Sooko who has provided support to researcher.
6. Mrs. Ruliana, S.Pd., as an English teacher for class VIIIC of SMP Negeri 1 Sooko who has provided motivation to researcher.

Finally, the researcher expects that this thesis will be useful for the readers. Any criticism and valuable suggestions would be appreciated.

The researcher,



Nimas Ayu Meta Kusuma Wardani
NIM. 204190030



TABLE OF CONTENTS

COVER

TITLE

APPROVAL SHEET	i
RATIFICATION SHEET	ii
SURAT PERSETUJUAN PUBLIKASI	iii
LETTER OF AUTHENTICITY	iv
DEDICATION	v
MOTTO	vi
ABSTRACT	vii
ACKNOWLEDGEMENT	viii
TABLE OF CONTENTS	ix
LIST OF TABLES	xii
LIST OF FIGURES	xiii
LIST OF APPENDICES	xiv

CHAPTER I INTRODUCTION

A. Background of the Study.....	1
B. Identification of the Problems.....	4
C. Limitation of the Study.....	4
D. Statements of the Problems.....	5
E. Objectives of the Study.....	5
F. Significances of the Study.....	5
G. Organization of the Thesis.....	6

CHAPTER II LITERATURE REVIEW

A. Theoretical Background.....	8
1. Teaching English as a Foreign Language (TEFL)	
a. The Scope of TEFL.....	8
b. The Four English Skills.....	9
c. The Three English Components.....	10
2. Vocabulary	
a. The Scope of Vocabulary.....	11
b. Kinds of Vocabulary.....	13
c. Classification of Vocabulary.....	14

d. How to Assess Vocabulary	17
e. Teaching Vocabulary	20
3. Word Connecting Game	
a. The Scope of Word Connecting Game	23
b. The Roles of Word Connecting Game to Develop Students' Vocabulary Mastery	25
c. The Procedure of Word Connecting Game	25
B. Previous Research Findings	27
C. Theoretical Framework	31
D. Research Hypothesis	32

CHAPTER III RESEARCH METHOD

A. Research Design	33
B. Research Setting	35
C. Population and Sample	35
D. Operational Research Variables	37
E. Data Collection Techniques and Instruments	38
F. Validity and Reliability	40
G. Data Analysis Technique	42

CHAPTER IV FINDING AND DISCUSSION

A. Research Location	46
1. History Background of SMPN 1 Sooko	46
2. Vision, Missions, and Goals of SMPN 1 Sooko	47
B. Data Description	48
1. Schedule of the Research	49
2. Teaching Procedures in Experimental Class and Control Class	50
3. Students Score of Pre-test in Experimental and Control Class	55
4. Students Score of Post-test in Experimental and Control Class	59
5. The Description of Comparison Data of Pre-test and Post-test	62
C. Inferential Statistics	66
1. Assumption Test	66
2. Hypothesis Testing and Interpretation	68
D. Discussion	69

CHAPTER V CONCLUSSION AND RECOMMENDATION

A. Conclusion..... 72
B. Recommendation..... 72

BIBLIOGRAPHY..... 74

APPENDICES..... 77

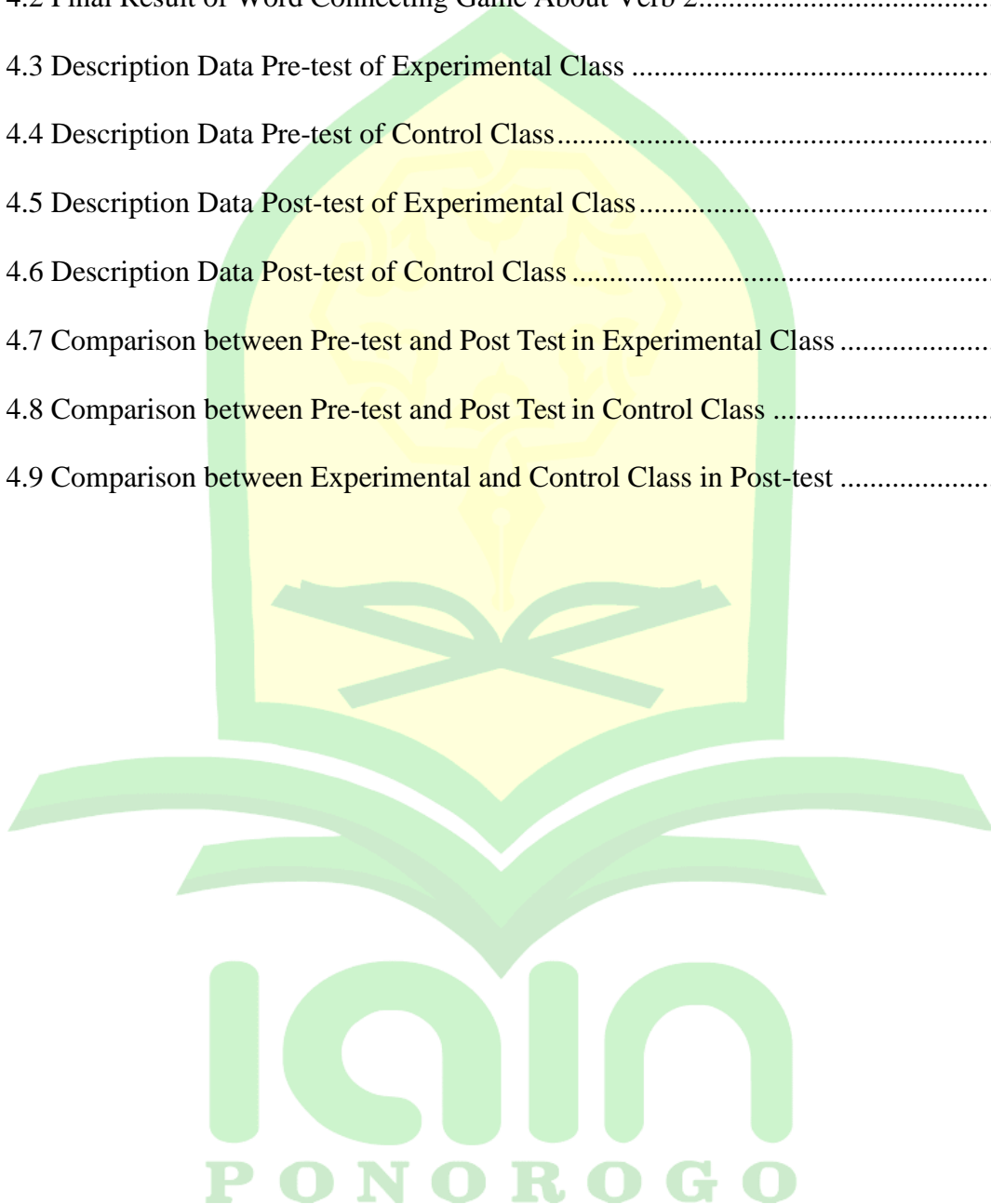


LIST OF TABLES

Table 2.1 List of Playing Word Connecting Game	25
Table 3.1 The Population of The Grade VIII Students in SMP Negeri 1 Sooko	36
Table 3.2 The Average Score of English Daily Test 2022/2023 Academic Year	36
Table 3.3 Sample of Class VIII-A and VIII-B 2022/2023 Academic Year	37
Table 3.4 Interpretation of the Reliability Coefficient	42
Table 4.1 Research Schedule of Experimental Class	49
Table 4.2 Research Schedule of Control Class	49
Table 4.3 The Score of Pre-test in Experimental Class	55
Table 4.4 Frequency Distribution of Pre-test in Experimental Test	56
Table 4.5 The Score of Pre-test in Control Class	57
Table 4.6 Frequency Distribution of Pre-test in Control Class	57
Table 4.7 The Score of Post-test in Experimental Class	59
Table 4.8 Frequency Distribution of Post-test in Experimental Class	59
Table 4.9 The Score of Post-test in Control Class	61
Table 4.10 Frequency Distribution of Post-test in Control Class	61
Table 4.11 The Comparison Data of Experimental Class in Pre-test & Post-test	62
Table 4.12 The Comparison Data of Control Class in Pre-test and Post-test	64
Table 4.13 Normality and Homogeneity in Pre-test	66
Table 4.14 Normality and Homogeneity in Post-test	67

LIST OF FIGURES

Figure 2.1 The Conceptual Framework Word Connecting Game	31
Figure 3.1 Non-equivalent Control Group Design.....	33
Figure 4.1 Final Result of Word Connecting Game About Verb 1.....	51
Figure 4.2 Final Result of Word Connecting Game About Verb 2.....	53
Figure 4.3 Description Data Pre-test of Experimental Class	56
Figure 4.4 Description Data Pre-test of Control Class.....	58
Figure 4.5 Description Data Post-test of Experimental Class.....	60
Figure 4.6 Description Data Post-test of Control Class	62
Figure 4.7 Comparison between Pre-test and Post Test in Experimental Class.....	63
Figure 4.8 Comparison between Pre-test and Post Test in Control Class	65
Figure 4.9 Comparison between Experimental and Control Class in Post-test	66



LIST OF APPENDICES

Appendix: 1 Request for Research Validation	91
Appendix: 2 Validation Instrument of Lesson Plan	92
Appendix: 3 Lesson Plan of Experimental Class	94
Appendix: 4 Lesson Plan of Control Class	102
Appendix: 5 Validation Instrument of Test.....	110
Appendix: 6 Blue-Print for Pre-test and Post-test.....	112
Appendix: 7 Instrument for Pre-test Before Validity	116
Appendix: 8 Key Answer for Pre-test Before Validity	119
Appendix: 9 Instrument for Post-test Before Validity	120
Appendix: 10 Key Answer for Post-test Before Validity	124
Appendix: 11 Instrument for Pre-test After Validity	125
Appendix: 12 Instrument for Post-test After Validity.....	127
Appendix: 13 Key Answer for Pre-test and Post-test After Validity	129
Appendix: 14 Validity of Pre-test	130
Appendix: 15 Reliability of Pre-test.....	132
Appendix: 16 Validity of Post-test.....	134
Appendix: 17 Reliability of Post-test.....	136
Appendix: 18 Difficulty Level of Pre-test and Post-test Items	138
Appendix: 19 Differentiating Levels of Pre-test and Post-test Items.....	140
Appendix: 20 Score of Experimental Class and Control Class in Pre-test	144
Appendix: 21 Score of Experimental Class and Control Class in Post-test.....	147
Appendix: 22 Result of Normality Test in Pre-test and Post-test	150
Appendix: 23 Result of Homogeneity Test in Pre-test and Post-test.....	150
Appendix: 24 T-test of the Both Averages in Experimental Class	151

Appendix: 25 T-test of the Both Averages in Control Class.....	151
Appendix: 26 r-table.....	152
Appendix: 27 Research Documentation.....	154
Appendix: 28 Research Permit Letter	156
Appendix: 29 Letter of Accomplishment.....	157
Appendix: 30 Curriculum Vitae.....	158



CHAPTER I

INTRODUCTION

A. Background of The Study

One important aspect of learning English is vocabulary, because vocabulary is the main aspect that plays a role in all language skills. In the teaching and learning process, English is taught in four language skills. There are listening, speaking, reading and writing skill. To develop these four skills, vocabulary is needed because the function and role of vocabulary is to build the four language skills. Limited vocabulary mastery hinders students from developing language skills. Vocabulary is one basic component of language, there is not any language exist without words.² So, students will understand the reading text, they can write some notes, they can speak the language if they can master it. Students need vocabulary to make it easy to master English. It is impossible for students to use English better if their vocabulary is low.

Without an extensive vocabulary and strategy for acquiring new vocabulary, learners often achieve less than their potential an may be discouraged from making use of language learning of opportunities around them such as listening to the radio, listening to native speakers, using the language in different contexts, reading or watching television.³ In other words, by having a wide vocabulary, students can use English easily.

Vocabulary teaching for eighth graders of junior high school focuses on verbs. This is based on the parts of speech in teaching vocabulary which consists of: noun, pronoun, adjective, verb, adverb, preposition, conjunction, and interjection.⁴ For eighth graders, they

² Sofyan Kamil Darajat, "The Effectiveness of Environmental Mnemonic Technique (EMT) to Improve Students' Vocabulary Mastery in Vocation Highschool," (PhD Thesis, Muhammadiyah University of Purwokerto, 2016), 4.

³ Jack C, Richards and Willy A. Renandya, *Methodology in Language Teaching: An Anthology of Current Parctice* (New York: Cambridge University Press, 2001), 255.

⁴ John E. Warriner, *English Composition and Grammar: Fourth Course* (Orlando, FL: Harcourt Brace Jovanovich, 1988), 331.

are at the level of knowledge about verbs, namely verb 1 in the simple present tense and verb 2 in the simple past tense.

Problems in learning and teaching English still exist in schools, because English is completely different from Indonesian in the system of structure, pronunciation and vocabulary. For example, students tend to forget the meaning of words that have been taught or practiced before. Vocabulary is usually taught through memorizing words. For teachers to create teaching English effectively and efficiently is not an easy job, therefore an English teacher must be able to carry out teaching and learning activities. They must present the material using appropriate teaching techniques. Good teaching techniques make understanding and mastering lessons like other subjects requiring appropriate techniques and methods, teaching language also requires appropriate techniques and methods. In fact, learning English especially, to memorize vocabulary words is a boring thing for some students.

Based on the researcher's observation through preliminary studies during teaching and learning activities in grade eight of SMP Negeri 1 Sooko Ponorogo, it was found that many students experienced difficulties in learning English, especially in vocabulary. According to the explanation from the eighth-grade teacher at SMPN 1 Sooko, students are less motivated if the teacher provides exercises or materials in class. Some students seemed less active during the lesson. The teacher does not know whether or not the material that has been taught by students understands or not. Students find it difficult to spell, remember words, choose the right words and understand the meaning of words based on context, and feel bored and less interested in learning vocabulary.⁵

When the researcher asked students to mention some vocabularies, many students were confused when they mentioned some English vocabularies. Most students also think

⁵ Pratiwi, S.Pd, Eighth Grade English Teacher, Personal Interview, Sooko, February 6 2023.

English is difficult, so they are lazy to learn new vocabulary. Students tend to get bored and rarely participate in English classes.

One teaching strategy that can motivate students to learn English is to use appropriate strategies such as games. The use of games really helps teachers to bridge students' motivation and interest in learning. The game gives participants a feeling of competition to participate in the process of learning the vocabulary and motivating them to repeat it enthusiastically.⁶ There are lots of interesting games to teach vocabulary. It could probably be solved using proper teaching techniques. As a teaching technique, the researcher chose vocabulary games.

This type of vocabulary game is called word connecting. Word connecting game is a kind of vocabulary game that is played by using the last letter of the previous word to be the beginning of the next word. Example: *take, eat, tell, leave*, etc. This game is a challenging and fun activity in learning vocabulary. Word-Connection game can be used to improve students' vocabulary mastery or consider to vary it to get more excitement and creativity in the learning process.⁷ Word Connecting Game is also similar to the Word Chain Game. Word chain game is a kinds of game purposing to improve the player's ability in mastering vocabulary of words.⁸

The researcher assumes that the use of word connecting games seems to be a good alternative and an effective way to teach English in the eighth grade of SMP Negeri 1 Sooko Ponorogo. In addition to this teaching technique can make students active in the teaching and learning process, it also allows students to be creative without shame, this technique is also able to improve students' ability to master vocabulary in their knowledge.

⁶ Goh Ying Soon and Yee Leong Yeng, "Empirical Study on The Use of Puzzle Games for Improving Chinese Character Acquisition of Non-Native Learners of Chinese Language," *Academic Journal UiTMT*, 4, 2 (2015). <http://journale-academiauitmt.edu.my/>, accessed on April 26, 2023.

⁷ Novalia Tanasy and Nuraliah Ali, "Improving the Vocabulary Mastery Through Word-Connection Game," *ETERNAL*, 5, 2 (2019): 334.

⁸ Lewis Carroll, *Word Chains-the Game of Subtle Changes*, (2007). www.wordchains.com/faq.php, accessed on January 10, 2023.

Based on the explanation above, the researcher intend to conduct a quasi-experimental study entitled “The Effectiveness of Word Connecting Game on Students’ Vocabulary Mastery at Grade VIII of SMP Negeri 1 Sooko Ponorogo”.

B. Identification of The Problems

Based on the background above, it can be concluded that problem identification is as follows:

1. The number of students who like learning English was still low.
2. Most students experience difficulties in mastering the four English skills.
3. Most of the students still have a little mastery of English vocabulary.

Researcher can say that the core of the students’ problems is due to a lack of practice in mastering vocabulary which causes them to experience difficulties in mastering the four language skills (reading, writing, listening and speaking in English). It’s complicated when they don't know much vocabulary to present their ideas.

C. Limitation of The Study

This research focuses on the teacher’s strategy in teaching students' vocabulary mastery by using the Word Connecting Game. This will focus on verb 1 in the simple present tense and verb 2 in the simple past tense in solving problems. The problem is defined as follows: In the eighth grade of SMPN 1 Sooko, many students experience difficulties in mastering vocabulary due to ineffective learning strategies. The teacher must have the right strategy to train students’ vocabulary mastery because vocabulary is fundamental in mastering the four English skills.

D. Statement of The Problems

Based on the problems that have been raised in the background, the research questions are formulated as follows:

Is there any significant effect of the use of Word Connecting Game on students' vocabulary mastery in grade VIII of SMPN 1 Sooko?

E. Objective of The Study

The general objective of the study was to find out the effectiveness of using Word Connecting Games in teaching vocabulary in grade VIII of SMPN 1 Sooko.

F. Significance of The Study

The results of this study are expected to be used theoretically and practically.

1. Theoretically

This research contributes to the development of knowledge in teaching English vocabulary. Word connecting games can provide solutions to some of the problems teachers face in improving their students' vocabulary mastery. Moreover, word connecting games can be a new model of vocabulary learning.

2. Practically

a. The Teachers

The researcher hope that this research will help teachers find new strategies for vocabulary teaching and motivate them to improve their vocabulary teaching methods. Teachers can use word connecting games in the classroom to make students more creative and engage in other activities in the classroom learning process.

b. The Students

The researcher hopes that the use of word connecting games in teaching vocabulary can reduce students' problems in English class, improve students'

vocabulary performance, and make students more active in the teaching and learning process.

c. The Readers

The researcher hopes that the readers will know about the use of word connecting game in teaching and learning English, especially in improving students' vocabulary.

d. The Researchers

The researcher hopes that this research will serve as a useful reference. This research probably has some weaknesses that other researchers should consider for better research on the same topic, to determine the effectiveness of using word connecting game to improve students' vocabulary.

G. Organization of The Thesis

As description of the design of the research ideas that went into this experiment, the researcher organized this thesis into several parts, all of which consist of sub that are connected to each other to form a complete unit. The organization of thesis is given to make the reader understand the content of the thesis. This research report is divided into his five interrelated chapters as follows:

CHAPTER I INTRODUCTION

The first chapter presents the basis of the research including background of the study, identification of the problems, limitation of the study, statements of the problems, objectives of the study, significances of the study, and organization of the thesis.

CHAPTER II LITERATURE REVIEW

The second chapter contains a description of theoretical background, previous research findings, theoretical framework and research hypothesis.

CHAPTER III RESEARCH METHODS

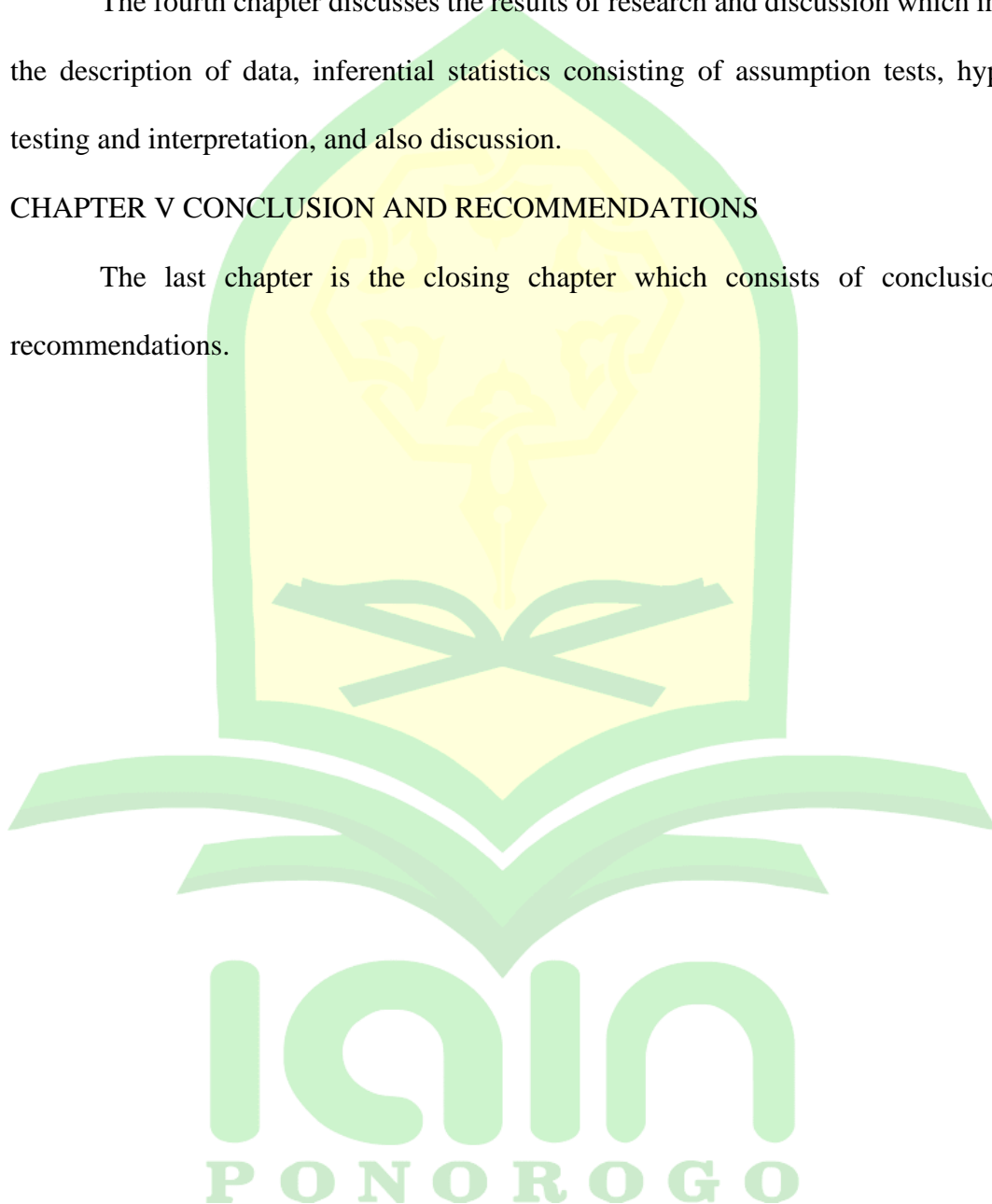
The third chapter discusses the research design which contains: research design, research setting, population and sample, operational research variables, data collection technique and instruments, validity and reliability and also data analysis technique.

CHAPTER IV FINDINGS AND DISCUSSION

The fourth chapter discusses the results of research and discussion which includes: the description of data, inferential statistics consisting of assumption tests, hypothesis testing and interpretation, and also discussion.

CHAPTER V CONCLUSION AND RECOMMENDATIONS

The last chapter is the closing chapter which consists of conclusions and recommendations.



CHAPTER II

LITERATURE REVIEW

A. Theoretical Background

1. Teaching English as a Foreign Language (TEFL)

a. The Scope of TEFL

As an international language, English is considered as an important learning language. English as a foreign language curriculum and pedagogy has emphasized the importance of communicative teaching strategies and the use of functional language, so that the aim of teaching and learning English is good communication. TEFL is a qualification which enables you to teach English to those whose first language is not English in commercial language schools and institutions of further education both overseas and in the UK.⁹ English as a second language.¹⁰ However, English is a foreign language all over the world. In other words, it is often taught in schools, but does not play an important role in the life of the nation or society. This is to create a workable situation as a foreign language is one of the subjects in the curriculum and students are encouraged to talk a lot in class and express their thoughts, not just what the teacher says. Students are expected to have skills or knowledge of English that can be used to communicate.

In the learning process, teachers also need to prepare materials, media, and learning methods properly. Teaching is showing or helping someone to learn how to do something, giving instructions, guiding in the study of something, providing with knowledge, causing to know or understand.¹¹ That is, teaching is a process

⁹ Santoso, *Teaching English as a Foreign Language* (Manchester: Manchester University, 2010), 24.

¹⁰ Geoffrey Broughton, et al., *Teaching English as a Foreign Language* (New York: Routledge, 1980), 6.

¹¹ H. Douglas Brown, *Teaching by Principles: An Interactive Approach to Language Pedagogy* (Englewood Cliffs, NJ: Prentice Hall Regents, 2007), 7.

carried out by the teacher based on experience, knowledge and preparation of teaching materials to achieve learning objectives.

From the description above it can be concluded that by teaching English students are expected to be able to use it to communicate. Everyone knows that English is an international language used in the international community. English is very important and is usually considered the most important of all subjects. Especially because reading, writing, speaking, and listening are the four language skills that are needed by students at all levels in school and are also needed for students' lives in the future.

b. The Four English Skills

In learning a foreign language, students must also learn the four English skills to achieve learning objectives. They are speaking skill, listening skill, reading comprehension and writing skill.

The first is speaking skill. Speaking is to say words orally, to communicate as by talking, to make a request, and to make a speech.¹² Speaking is one of the most important skills to be developed and enhanced as means of effective communication.¹³ Speaking skill is regarded one of the most difficult aspects of language learning. The first thing students need to measure in order to be able to speak is vocabulary mastery. So, speaking means communicating using a large vocabulary. If someone doesn't have a large vocabulary, they cannot speak well or understand it.

¹² David Nunan, *Language Teaching Methodology: A Textbook for Teachers* (New York: Phoenix Ltd., 1995), 593.

¹³La-Mei Leong and Sayedeh Masoumeh Ahmadi, "An Analysis of Factors Influencing Learners' English Speaking Skill," *International Journal of Research in English Education* (2017): 1. <https://www.sid.ir/paper/349619/en>, accessed on January 2, 2023.

The second is listening skill. Listening is the process by which spoken language is converted to meaning in the mind.¹⁴ Listening is also helps with the pronunciation of the language. As long as people are communicating, they want to know what the other person has to say.

The third is reading comprehension. Reading is working with the text, which is accompanied by certain affects and causes particular social effects.¹⁵ That could be through books, lyrics, articles, and much more. Reading is also an activity of obtaining information from a text. Getting information from a text is not difficult, but it can be difficult if the reader does not know what the words in the text mean.

Fourth is writing skill. Writing is the skill of typing or writing something by hand. Writing is believed to be an important language skill that plays a fundamental role in communication, especially in an educational setting.¹⁶ We might write a letters and messages to friends, to-do lists, poems, books, and more in your target language. Writing is also a productive language skill, requiring a large vocabulary to generate ideas, express decisions, and write ideas.

c. The Three English Components

In the process of learning English, apart from learning the four English skills, students also need to learn English components to achieve learning goals. The teaching of the language component is part of the language program. Even though practical teaching in the field takes place in an integrated manner, a teacher needs to understand several important concepts related to the three language components, especially those regarding the English component. In general, the

¹⁴ Mary Renck Jolongo, *Strategies for Developing Children's Listening Skills* (Indiana: Phi Delta Kappa Educational Foundation, 1991), 10.

¹⁵Ilin Illia, "Reading (In) H. Skovoroda," *Research Gate* (2022). https://www.researchgate.net/profile/Illia-Ilin/publication/364011450_Reading_in_H_Skovoroda/links/6335f1beff870c55cee81d1f/Reading-in-H-Skovoroda.pdf, accessed on January 2023.

¹⁶ Eman Fathia Baresh, "Developing Libyan Undergraduates' Writing Skills Through Reflective Journaling: A Critical Literature Review," *Journal of English Language Teaching and Learning (JELTL)*, 3, 1 (June 2022): 27.

language component consists of three aspects, they are grammar, vocabulary, and pronunciation.¹⁷

The first component is grammar or language rules. Grammar is a pattern and rules that must be followed if we want to learn a language properly. This component is a language framework that must be followed so that the language can be received properly. A language is said to be good if it complies with or obeys the rules or grammar that apply to that language.¹⁸

The second component is vocabulary. Vocabulary is a collection of words that are owned by a language and gives meaning when we use that language. In general, the vocabulary division is divided into four major groups, namely the Noun group, the Verb group, the Adjective group, and the Adverb group. Apart from that, there are other groups of words, namely Pronouns, Articles, Prepositions and Conjunctions.¹⁹ In order for students to be able to use the four English skills, students need to master a lot of vocabularies.

The third component is Pronunciation. Pronunciation is a way of saying the words of a language. The pronunciation includes intonation and emphasis on certain syllables. English pronunciation is very different from the pronunciation of the mother tongue or first language.²⁰ Therefore, students need to learn pronunciation so they can use the four English skills properly and correctly.

2. Vocabulary

a. The Scope of Vocabulary

Vocabulary plays an important role as it exists in all language skills. To master the four skills of English, learners must first acquire vocabulary as a core

¹⁷ Kasihani K.E, Suyanto, *English for Young Learners*, (Jakarta: PT. Bumi Aksara, 2007), 43.

¹⁸ *Ibid.*

¹⁹ *Ibid.*

²⁰ *Ibid.*

skill. Vocabulary is all the words known to, or used by person.²¹ This means that the vocabulary is all the words of the language, and the vocabulary is also the list of words and their meanings. Furthermore, vocabulary is all the words that exist in a language or that are used when discussing a particular subject.²² This is the language in which vocabulary is most important, and students with a large vocabulary. It means success at all language skills (speaking, writing, listening and reading) but those with limited vocabulary will get trouble in those skills.

Vocabulary is a collection of words in English language.²³ This means that a vocabulary is a component of the language that provides information or description in terms of language. Another definition, vocabulary is part of relationship on language.²⁴ Vocabulary is a major component of language. Because without words and vocabulary people do nothing to practice language.

Vocabulary is the words that teach in the foreign language.²⁵ So, vocabulary is one of the language elements that must be mastered in learning English.

Vocabulary is a core component of language proficiency and provides much of the basis for how well learners can speak, listen, read, and write.²⁶ Without a large vocabulary and strategies for acquiring new vocabulary, learners often fail to reach their potential and are reluctant to take advantage of language learning opportunities within their environment, such as watching the movie, listening to native speakers, reading the novel, using the language in different context and how

²¹ A S Hornby, *Oxford Advanced Learner's Dictionary of Current English* (Oxford: Oxford University Press, 1995), 978.

²² *Cambridge Learner's Dictionary* (Cambridge: Cambridge University Press, 2001), 708.

²³ Howard Jackson and Etienne Ze Amvela, *Words, Meaning and Vocabulary* (London; New York: Continuum, 2000), 118.

²⁴ Dian Rakhmawati, "The Influence of Vocabulary Journal in Teaching Students' Vocabulary Mastery," *Smart Journal*, 2, 1 (2016): 53. <http://ejournal.stkipmpringsewu-lpg.ac.id/index.php/smart/article/view/148>, accessed on December 27, 2022.

²⁵ Penny Ur, *A Course in Language Teaching Practice and Theory* (New York: Cambridge University Press, 1991), 60.

²⁶ Jack C. Richards and Willy A Renandya, *Methodology in Language Teaching An Antalogy of Current Practice* (New York: Cambridge University Press, 2001), 255.

to speak English well.

Based on the definitions above, researchers can conclude that vocabulary is an important part of language. Without vocabulary, language cannot be created and spoken.

b. Kinds of Vocabulary

Many kinds of vocabulary can be used to convey knowledge to some people. Another words, different vocabulary can be used to identify a person's level. Who is in beginner level, intermediate level, or advanced level. So, vocabulary type is part of the knowledge to know how far one's ability is in vocabulary. There are two types of vocabulary, as follows:

1) Receptive vocabulary or passive vocabulary.

Receptive vocabulary is the words that learners recognize and understand when used in context, but they cannot produce them. Vocabulary that learners recognize when they see or encounter it when reading a text, but do not use it when speaking or writing.

This suggests that receptive vocabulary is perceived and understood by students when it occurs in contexts where it cannot be properly generated.²⁷

2) Productive vocabulary or active vocabulary.

Productive vocabulary is the words that the learners understand and can pronounce correctly and use constructively in speaking and writing. It involves what is needed for receptive vocabulary plus the ability to speak or write at the appropriate time. Therefore, productive vocabulary can be addressed as an active process, because the learners can produce the words to express their

²⁷ Mofareh Alqahtani, "The Importance of Vocabulary in Language Learning And How To Be Taught," *International Journal of Teaching and Education*, 3 (2015): 21–34. <https://doi.org/10.20472/TE.2015.3.3.002>, accessed on January 5, 2023.

thoughts to others.²⁸

This suggests that productive vocabulary is words that students know and can pronounce correctly. Both types of vocabulary are recognized and understood by learners when used in context.

c. Classification of Vocabulary

Vocabulary is divided into function and content of words. Function words are a closed class and cannot add prepositions, auxiliary verbs, modal auxiliary verbs, or linguistic constructs. Content words, on the other hand, can be added at any time, as new scientific advances require new language and communication about new inventions. This means that the vocabulary is the words that are part of the language, but words can and cannot be combined and exist alone. So, to make understanding about word more clearly. Words are also classified as: Nouns, Pronouns, Verbs, Adjectives, Prepositions, Conjunctions, and Interjections.

Words are divided into different kinds of classes, called “Parts of Speech”, thus parts of speech are eight in number, they are 1) noun 2) pronoun 3) adjective 4) verb 5) adverb 6) preposition 7) conjunction 8) interjection.²⁹

Based on this, the researcher focuses on the Verbs in this research (Verb 1 in simple present tense and Verb 2 in simple past tense). A verb is a word that expresses action or otherwise helps to make a statement.³⁰ The verb is also the most important part and always appears in every sentence.

The verb form refers to when an action or condition occurs in relation to time. This is how the verb is written to indicate when it happened.

There are three main tenses associated with when an action occurs. Actions

²⁸ *Ibid.*

²⁹ John E. Warriner, *English Composition and Grammar: Fourth Course* (Orlando, FL: Harcourt Brace Jovanovich, 1988), 331.

³⁰ John E. Warriner, *English Workshop* (Orlando, Fla: Harcourt Brace Jovanovich, 1986),3.

can occur in the past, present, or future. Verb tenses are written to indicate in which of the three tenses the action takes place.

As mentioned above, tense refers to the period during which the action of a sentence takes place. There are three tenses that affect how the verb is written below:

1) Simple Present Tense

Simple present tense is the tense for the description, definition and statements of general truth.³¹ The simple present says that something was true in the past, is true in the present, and will be true in the future. It expresses general statements of fact and timeless truths.³² The simple present is used to express habitual or everyday activities.³³ Everyone can use the Simple Present Tense to show habits, facts, actions, or something that is happening right now or in real time.

There are several marker words that can be used to show the Simple Present Tense, including always, usually, often, normally, never and sometimes.

Present tense uses the Verb 1 formula (Subject + Verb 1) with the following example:

- a) I study English every day.
- b) The sun shines brightly.
- c) Tom always goes to school by car.

2) Simple Past Tense

The simple past indicates that an activity or situation began and ended at a

³¹ Tira Nur F, "Errors in Students' Writing Composition in Simple Present Tense: My Daily Activity," *Journal of English Language Education*, 2,1 (2019): 50.

³² Betty Schramper Azar, *Understanding and using English grammar: Third Edition* (Washington: Longman, 2006), 13.

³³ *Ibid.*

particular time in the past.³⁴

Sentence forms that use the Simple Past Tense are usually marked by the use of the second form of the verb and past tense. Markers in the simple past tense such as this morning, yesterday, last night, last week, a week ago, and so on.

Past tense uses the Verb 2 formula (Subject + Verb) with the following example:

- a) I walked to my office last morning.
- b) I made my own dinner last night.
- c) My grandfather called me last night.

3) Simple Future Tense

The simple future is a form of tenses that describes an event or events that will occur in the future. "Will" or "be going to" is used to express future time.³⁵ The simple future tense has several time markers such as next week, tomorrow, tonight, and so on.

Future tense uses the Verb 1 formula (Subject + Will / will go to + Verb I) with the following example:

- a) Susie will arrive tomorrow morning.
- b) Fitrië will not come to her friend's birthday party tonight.
- c) Mira is going to visit her aunt in Canada.

Based on the definition above, the researcher will focus on vocabulary mastery material on verbs (verb 1 and verb 2). Verb 1 is used in the simple present tense which shows the present situation, while Verb 2 is used in the simple past tense which shows the past situation.

³⁴ *Ibid*, 27.

³⁵ *Ibid*, 51.

d. How to Assess Vocabulary

Vocabulary assessment can be used as a reference to determine the level of students' understanding of English as a foreign language. In learning English, students need to practice their four English skills such as writing, reading, speaking and listening through vocabulary mastery. If students do not master vocabulary, students will have difficulty practicing their four English skills. By mastering a lot of vocabulary, students are able to use their four English skills properly and correctly and can achieve learning objectives.

There are several ways to assess vocabulary in the form of tests and quizzes. Using multiple evaluations is ideal, as each has its own limitations. There are several basic options for assessing vocabulary as follows:³⁶

1) Define the Word

One way to assess vocabulary is to ask a person the definition of the word. In other words, when a teacher assigns a list of vocabulary words to learn to a student, the easiest way to determine if the student has mastered that new vocabulary is to give the student her test in a closed book where definitions must be provided. Depending on the grade, this may involve writing down the definition of each word, matching each word to its definition, or reciting the definition of the word given on the vocabulary card.

2) Choose the Correct Word

Once students understand the meaning of a word, they can apply that knowledge to select the correct word from multiple options. A test that asks students to choose from similar words is a good way to assess vocabulary.

Assessments like this worksheet can indicate whether students are familiar with

³⁶ Mary Gormandy White, *How to Assess Vocabulary: Ideas for Measuring Progress* (Tennessee: Your Dictionary, 2021) <https://education.yourdictionary.com/for-teachers/how-to-assess-vocabulary.html>, accessed on January 23, 2023.

the definition of a word.

3) Fill in the Correct Term

Testing students' vocabulary can be done with a simple fill-in exercise in which they complete a sentence using one word from the vocabulary. For example, if students are studying adverbs, this adverb worksheet can help assess their abilities. This doesn't have to be limited to certain parts of speech, but can be done with any vocabulary list.

4) Use the Word in Context

The real value of knowing a word is being able to use it in context. Assessing whether students can use words correctly in context indicates whether they are able to apply their knowledge of definitions. One way she does this is by asking students to write simple sentences of the vocabulary and review their own work to see if they are using the terms correctly.

5) Identify the Opposite

To familiarize students with high-level vocabulary, use antonyms to test their vocabulary knowledge. By giving opposite words the terms students learn.

6) Creative Ways to Test Vocabulary

It would be great if the basic vocabulary assessment was done by combining several creative options to evaluate student performance.

7) Illustrate Vocabulary with Art

Including drawing activities is a vocabulary test activity that students will like. After giving students a list of vocabulary items to learn, students are asked to draw one by one representing that word from the target list. This works especially well with site word lists. It's also a great way to connect vocabulary learning and word reading activities.

8) Identify Examples and Nonexamples

This is a way of testing students' vocabulary by using critical thinking skills to match audio examples of correct and incorrect phrases. The steps are as follows:

- a) The teacher brings up two lists of sentences, one sentence with the correct use of vocabulary and one with the wrong use.
- b) The teacher reads each sentence aloud and also pauses between each sentence so that students can identify the vocabulary and determine whether the word is used correctly or not.
- c) The teacher can ask students to respond verbally with “true” or “false”. Alternately, students can list their responses to print and count at the end of the activity.

9) Brainstorm Words in Categories

Another way to assess vocabulary is to assign students to a specific category and have them list all the words they know that could fit into that category. For example, the teacher could ask students to list all the words they can think of to describe their emotions. As a more specific activity related to science lessons, the teacher can ask students to write lists of words related to nature and the sea. The teacher can browse student word lists to identify words that do not fit into the category and count the words found to assess student knowledge.

10) Create a Drama

To assess whether students can actually use vocabulary in writing and speaking, the teacher can ask students to make skits or short speeches using vocabulary to appear in front of the class. Students can do it alone or in pairs or small groups. The most important rule is to adopt some vocabulary and be careful to use it correctly and appropriately. The assessment can be made by

observing whether they match the correct number of words and whether the way they use the words shows an understanding of what they mean.

11) Come Up with a Title

This is done by tapping into students' creativity by asking them to come up with a unique title for their favorite type of entertainment that includes words from their current vocabulary list. Let students decide whether to create a song title, a book, a movie, a TV show, a video game, or a website. The caveat is that the term should not be used in a sarcastic or nonsensical way. The title must have the correct word usage.

12) Common Mechanisms Used in Schools

Problems in vocabulary assessment often arise because it is not easy to identify what it means to know a word. Several assessment mechanisms are commonly used by schools, such as: observational data, vocabulary games, teacher created tests, word journals or standardized tests.

e. Teaching Vocabulary

Teaching English vocabulary is integrated with the four skills of language. Vocabulary, on the other hand, plays an important role in mastering the four language skills. Teaching vocabulary is one of the most important aspects of teaching English or any other foreign language. This is because the number of vocabularies in one language is unlimited. Vocabulary must be presented interactively in four language skill. Learning a language without vocabulary was impossible. Vocabulary is therefore the most important subject in the teaching and learning process.

In teaching vocabulary, teachers also must provide opportunities to organize vocabulary. It is in meaningful ways to make it easier to learn by students.

Into the bargain, teacher also must focus on vocabulary.³⁷ It means that, when teaching vocabulary, teachers emphasize vocabulary in their curricula and classrooms so that students realize the importance of vocabulary and understand that learning a language is more than just learning grammar.

Also, there is a lot to learn about vocabulary such as: The scope, the sheer number of words and phrases to learn, and the depth of knowledge students need to know about each vocabulary. The material primarily assists students in her two areas.

The teacher should provide frequent and up-to-date vocabulary that fits the needs of the learner in a natural context. The material chosen should also help students learn vocabulary better by teaching techniques and strategies that can be used to continue learning outside the classroom. In addition, the types of words taught to students are important. All words to be taught to students must be direct to students, so the goal is to choose the most productive words to teach. In teaching vocabulary, there are several guidelines for communicative handling of teaching vocabulary as follows:

- 1) Allocate specific class time to vocabulary learning.
- 2) Help students to learn vocabulary in context.
- 3) Play down the role of bilingual dictionaries.
- 4) Encourage students to develop strategies for determining the meaning of words.³⁸

Based on the explanation above, it shows that when the teacher starts teaching vocabulary, the teacher must pay attention to all aspects related to teaching

³⁷ Jeanne Mc. Carten, *Teaching Vocabulary, Lesson from the Corpus, Lesson for the Classroom*, (United State America, Cambridge University Press, 2007), 19-23.

³⁸ H. Douglas Brown, *Teaching by Principles: An Interactive Approach to Language Pedagogy* (Englewood Cliffs, NJ: Prentice Hall Regents, 2007), 365.

vocabulary.

To make vocabulary teaching more effective, the researcher found several principles in teaching vocabulary. There are number of principle for the teaching of vocabulary:³⁹

- a) Developing a variety of techniques for the teaching of meaning. It means the teacher will need to make decisions about which words are useful to retain and choose techniques accordingly.
- b) Encouraging the development of effective strategies. Therefore, building on what we know of the strategies used by good language learners for vocabulary acquisition, it is possible to involve students in activities which help them to develop new strategies as well as strengthen existing ones.
- c) Exposing learners to vocabulary through reading and training lexical inferencing. It means that teacher suggest to learner for reading unfamiliar words involves a degree of problem solving this will help with the retention of the word. It is also useful to remember the distinction between inferencing for the purpose of fluent reading and inferencing as strategy in vocabulary acquisition.
- d) Teaching the effective use of dictionaries. While teacher can take on a number of useful roles with regard to dictionary, because the dictionary has come into focus as an important classroom and personal resource.
- e) Evaluating the vocabulary component of coursebooks. It means that contemporary coursebooks vary greatly in the degree to which they show a concern with vocabulary acquisition.
- f) Teaching vocabulary explicitly through a range of activity types. Moreover,

³⁹ Tricia Hedge, *Teaching and Learning in the Language Classroom*, (United Kingdom: Oxford University Press, 2002), 125-135.

direct vocabulary instruction is useful.

g) Developing resources for vocabulary teaching.

Based on the explanation above, the researcher concludes that when teaching vocabulary, the teacher must have various techniques to help students understand the meaning of vocabulary. Teachers also need to evaluate vocabulary components and develop effective strategies for teaching vocabulary.

3. Word Connecting Game

a. The Scope of Word Connecting Game

Game is one of several methods that are very easy to use in the learning process. Because games are more interesting and provide an easy way for students to recall and memorize English vocabulary. Game is an entertaining activity or sport that people play, usually needing some skill and played according to rules.⁴⁰ Many researchers had done their research by using classroom games in teaching English for young learners.

In this research the researcher used the concept of word games to train students to have a lot of vocabulary mastery. Word games help sharpen young minds and build vocabulary and spelling skills.⁴¹ The researcher used a word connecting game in this research. Connect with word games is designed to help students increase their vocabulary skills with cross-curricular, grade-appropriate words and activities.⁴²

Word-Connection game can be used to improve the students' vocabulary mastery or consider to vary it to get more excitement and creativity in the learning

⁴⁰ *Cambridge learner's dictionary* (Cambridge: Cambridge University Press, 2001), 275.

⁴¹ Debra Wise, *Great Big Book of Children's Games: over 450 indoor and outdoor games for kids* (New York: Reader's Digest Association, 1999), 69.

⁴² *Connect With Words: Grade 3* (Columbus: American Education Pub, 2007), 5.

process last letter.⁴³ Word Connecting Game is one of the games used in English as a second language teaching. Word Connecting game is similar to Word Chain game. Word Chain game is a kinds of game purposing to improve the players ability in mastering vocabulary of words.⁴⁴ These are games where the player has to say one word based on the chosen theme in turn or word games where the player comes up with words starting with the last letter. This is relevant to Holden's saying:

This is a variation on the Japanese game “*shiritori*”. Students try to connect the words by the way they are spelled, matching the last letter of a word with the first letter of the following word. For example: career, relocate, executive, entertain, neighbor, where each new word has as its first letter the last letter of the previous word. They can use any words that they know, but try to include in the chain all the new words that they are learning.⁴⁵

So, based on the opinions, it can be said that word connecting game is one of the games can be used by the teacher in language teaching process. Word chain game or word connecting game is well-known game that has been applied in language teaching class for a long time.⁴⁶ Word connecting game specially used in vocabulary teaching learning process.

When playing this game in a class, the first player is most likely the teacher, followed by the students in the class. Themes can be set according to the player's level (player grade and vocabulary).

In other words, the difficulty of this game is adjustable. In this research the

⁴³Novalia Tanasy and Nuraliah Ali, “Improving the Vocabulary Mastery Through Word-Connection Game” *ETERNAL*, 5,2 (2019): 334.

⁴⁴ Lewis Carroll, *Word Chains-the Game of Subtle Changes*, (2007). www.wordchains.com/faq.php, accessed on January 10, 2023.

⁴⁵ William R Holden, “Learning To Learn: 15 Vocabulary Acquistition Activities, Tips and Hints,” *Modern English Teacher*, 8, 1 (1999): 45.

⁴⁶ Achmad Yanuar Firmansyah, “Applying the Word Chain Game to Teach Descriptive Speaking to The Eight Graders in SMPN 26 Surabaya,” *RETAIN*, 3,2 (2015).

researcher took the theme of verbs such as verb 1 and verb 2. The following is an example of a series of verbs verb 1 and verb 2:

Table 2.1. List of Playing Word Connecting Game

No	Verb 1	Verb 2
1	Keep	Found
2	Put	Dug
3	Take	Gave
4	Eat	Enjoyed

b. The Roles of Word Connecting Game to Develop Students' Vocabulary Mastery

In the word connecting game, students try to connect one English word to another English word. By using this game, students will be able to remember all the English words that they have in their mind or have previously memorized or known. Word connecting game also help students explore the connections between English words, understand the meaning of words, and remember the meaning of these words.

To help students play this game related to the topic given by the teacher, the teacher can be the first player and say the first word related to the topic selected. In other words, teachers have to help their students if this game is applied to the teaching and learning process. Teachers help students understand the rules of the word connecting game and how word connecting games are used in teaching and learning English vocabulary.

c. The Procedure of Word Connecting Game

Word connecting games play an important role for teachers and students. Without teachers and students, this game is not applicable in the context of teaching language learning.

There are some steps to increase vocabulary using word connecting game:

- 1) Determine the category of the word you will play. For example: Fruit.
- 2) Point out one player to say one word about fruit. For example: Banana.
- 3) The next player should say the name of other fruit which begin with the last letter of the previous word. For example: Avocado.
- 4) Then, the third player said Orange and so on.
- 5) The player that could not answer should out of the game.⁴⁷

In addition, there are several other steps to play the conjunction game. For example, using the Animal category to provide some illustrations of the steps, but in this research the researcher used the verb category to play a word connecting game consisting of verb 1 and verb 2. The researcher chose verb 1 and verb 2 categories based on simple present tense and simple past material tense which requires a lot of vocabulary mastery regarding verbs that students have not fully mastered in their class. The steps are as follows:

- 1) Students are divided into several groups. The division of groups must be fair. For example there are 30 students, the teacher will make 3 groups, where in one group there are 10 students.
- 2) Each group will be given about 5-10 minutes to play by writing each word they choose on the board.
- 3) Select a verb category, for example: verb 1.
- 4) The first player can use the word "Put", then one of the other players says another verb 1 that starts with the last letter of the previous word.
- 5) "T" as the last letter of the word "Put" will be the first letter of the next verb 1.

⁴⁷ Ayu Rini, *Excellent English Games* (Jakarta: Kesaint Blanc, 2009).

The next player may say the word “Take”. Then, he asks the other players to name another verb 1, where the initial name of the verb 1 is “E”. “E” is the last letter of the word “Take”.

- 6) The player will be out of the game if he cannot give the correct answer.
- 7) The group with the most words and correct answers is the winner and will receive a prize from the teacher. Then the game will continue with new categories, such as verb 2, etc.

When play the word connecting game in class, the first player is most likely the teacher and follows the rest of the class. In class, the teacher can control the students to play this game related to the theme given by the teacher. A teacher can also be the first player followed by all students in the class. The researcher concluded that the word connecting procedure is a step that helps students understand how to play it in the classroom.

B. Previous Research Findings

The first, was conducted by Nurul Anisa in her thesis entitled “Increasing Students’ Vocabulary Mastery Through ABC Five Principle Game at The Seventh Grade of SMPN 01 Rongkong” in 2021. This research uses a quantitative method with a pre-experimental design. This research is focused on increasing students’ vocabulary mastery through the game of five ABC principles.⁴⁸ This research aims to determine whether the increase in students’ vocabulary mastery by using the five principles ABC game in SMPN 01 Rongkong can be done. The similarity of this research with previous research lies in the focus of the research, which is about increasing students’ vocabulary mastery through a game. In addition, the similarity between the two studies lies in the research method using

⁴⁸ Nurul Anisa, “Increasing Students' Vocabulary Mastery Through ABC Five Principle Game at The Seventh Grade of SMPN 01 Rongkong,” (Thesis, IAIN Palopo, South Sulawesi, 2021).

quantitative methods. While the difference between this research and previous research is that previous research used a variable in the form of ABC Games for students at the junior high school level, while this research used a variable in the form of Word Connecting Games for students at the junior high school level to improve their vocabulary mastery.

The second was conducted by Elin Ermasari in her thesis entitled “The Effect of Using Board Game Towards Students’ Vocabulary Mastery” in 2018. This research uses a quantitative method in the form of a quasi-experiment to obtain concrete evidence regarding the effectiveness of using Board Game media on mastery student vocabulary. This research is focused on increasing students’ vocabulary mastery through board games.⁴⁹ This research aims to determine whether the increase in students’ vocabulary mastery by using the Board Game method at SMPN 16 Tangsel can be done.

The similarity of this research with previous research lies in the focus of the research, which is about increasing students’ vocabulary mastery through a game. In addition, the similarity between the two studies lies in the research method using quantitative methods. While the difference between this research and previous research is that previous research used a variable in the form of Board Games for students at the junior high school level, while this study used a variable in the form of Word Connecting Games for students at the junior high school level to improve their vocabulary mastery.

The third, was conducted by Ismi Nurulita Firda in her thesis entitled “The Effect of Using The Four Square Strategy to Enhance Students’ Vocabulary Retention” in 2018. This research used a quantitative method in the form of a quasi-experiment which was conducted to obtain concrete evidence regarding the effectiveness of using The Four Square strategy on students’ vocabulary mastery. This research is focused on increasing

⁴⁹ Elin Ermasari, “The Effect of Using Board Game Towards Students' Vocabulary Mastery,” (Thesis, UIN Syarif Hidayatullah, Jakarta, 2018).

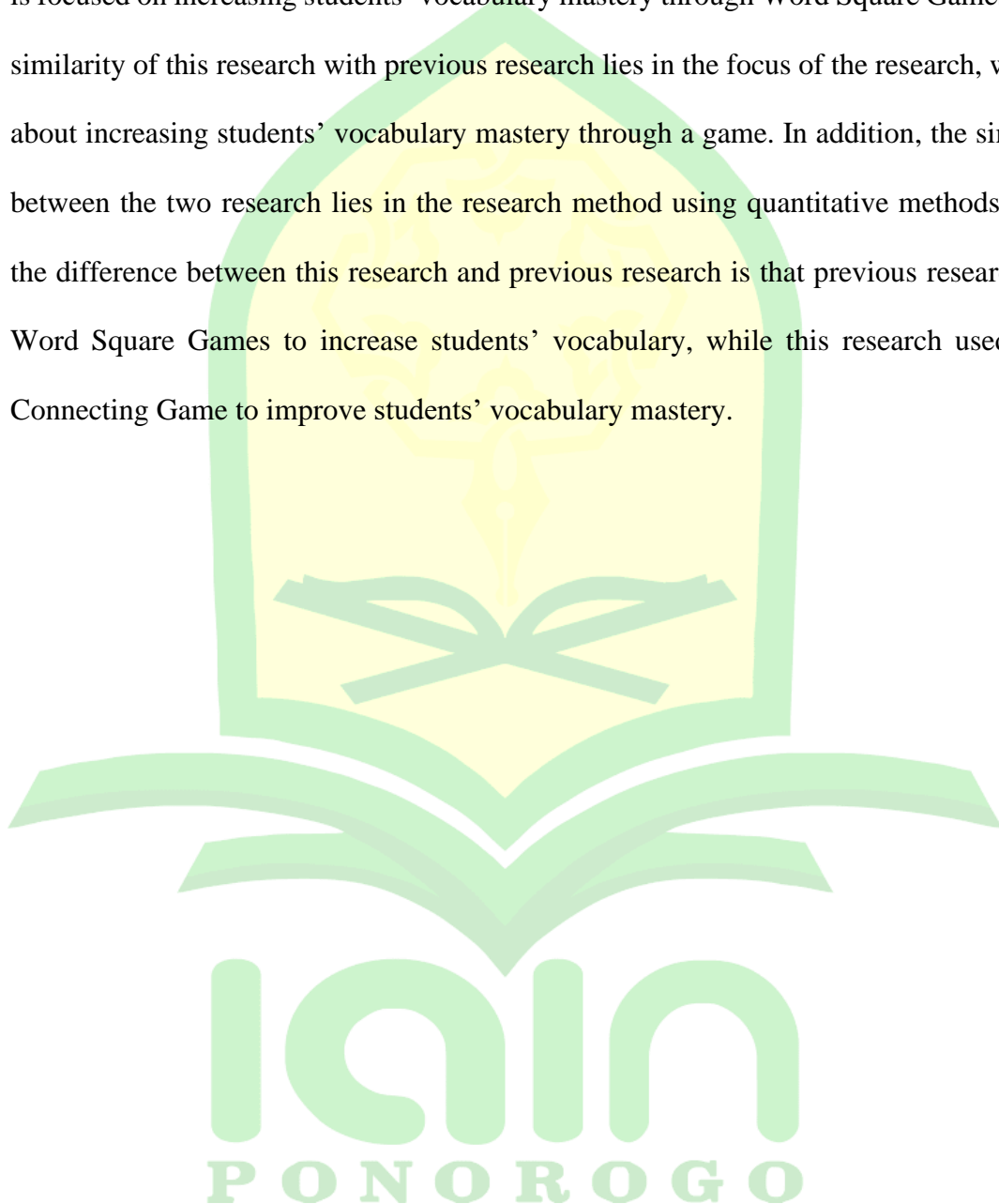
students' vocabulary mastery through The Four Square strategy.⁵⁰ This research aims to obtain empirical evidence about the effect of using The Four Square strategy on vocabulary storage in the remaining tenth grade of SMAN 5 Tangerang Selatan City. The similarity of this research with previous research lies in the focus of the research, which is about increasing students' vocabulary mastery through a method. In addition, the similarity between the two studies lies in the research method using quantitative methods. While the difference between this study and previous research is that previous studies used The Four Square strategy to increase students' vocabulary, while this research used media in the form of Word Connecting Games for students to improve their vocabulary mastery.

The fourth, was conducted by Ika Hardiyanti in her thesis entitled "The Effectiveness of Using Hyponymy Games in Teaching Vocabulary" in 2018. This research uses a quantitative method in the form of a quasi-experimental design. This research is focused on increasing students' vocabulary mastery through Hyponymy Games. This research aims to find out the effectiveness of Hyponymy Games in teaching English vocabulary in the seventh grade of SMP Somba Opu, Gowa.⁵¹ The similarity of this research with previous research lies in the focus of the research, which is about increasing students' vocabulary mastery through a game. In addition, the similarity between the two research lies in the research method using quantitative methods. While the difference between this research and previous research is that previous studies used Hyponymy Games to increase students' vocabulary at the junior high school level, while this research used Word Connecting Games for junior high school students to improve their vocabulary mastery.

⁵⁰ Ismi Nurulita Firda, "The Effect of Using The Four Square Strategy to Enhance Students' Vocabulary Retention," (Thesis, UIN Syarif Hidayatullah, Jakarta, 2018).

⁵¹ Ika Hardiyanti, "The Effectiveness of Using Hyponymy Games in Teaching Vocabulary," (Thesis, Universitas Muhammadiyah Makassar, South Sulawesi, 2018).

The fifth, was conducted by Heni Sophia in her thesis entitled “The Influence of Using Word Square Game Towards Students’ Vocabulary Mastery at The Seventh Grade of Mts Al-Hikmah Bandar Lampung in The Academic Year of 2018/2019” in 2018. This research uses quantitative method in the form of a true experimental design. This research is focused on increasing students’ vocabulary mastery through Word Square Games.⁵² The similarity of this research with previous research lies in the focus of the research, which is about increasing students’ vocabulary mastery through a game. In addition, the similarity between the two research lies in the research method using quantitative methods. While the difference between this research and previous research is that previous research used Word Square Games to increase students’ vocabulary, while this research used Word Connecting Game to improve students’ vocabulary mastery.



⁵² Heni Sophia, “The Influence of Using Word Square Game Towards Students' Vocabulary Mastery at The Seventh Grade of Mts Al-Hikmah Bandar Lampung in The Academic Year of 2018/2019,” (Thesis, UIN Raden Intan, Lampung, 2018).

C. Conceptual Framework

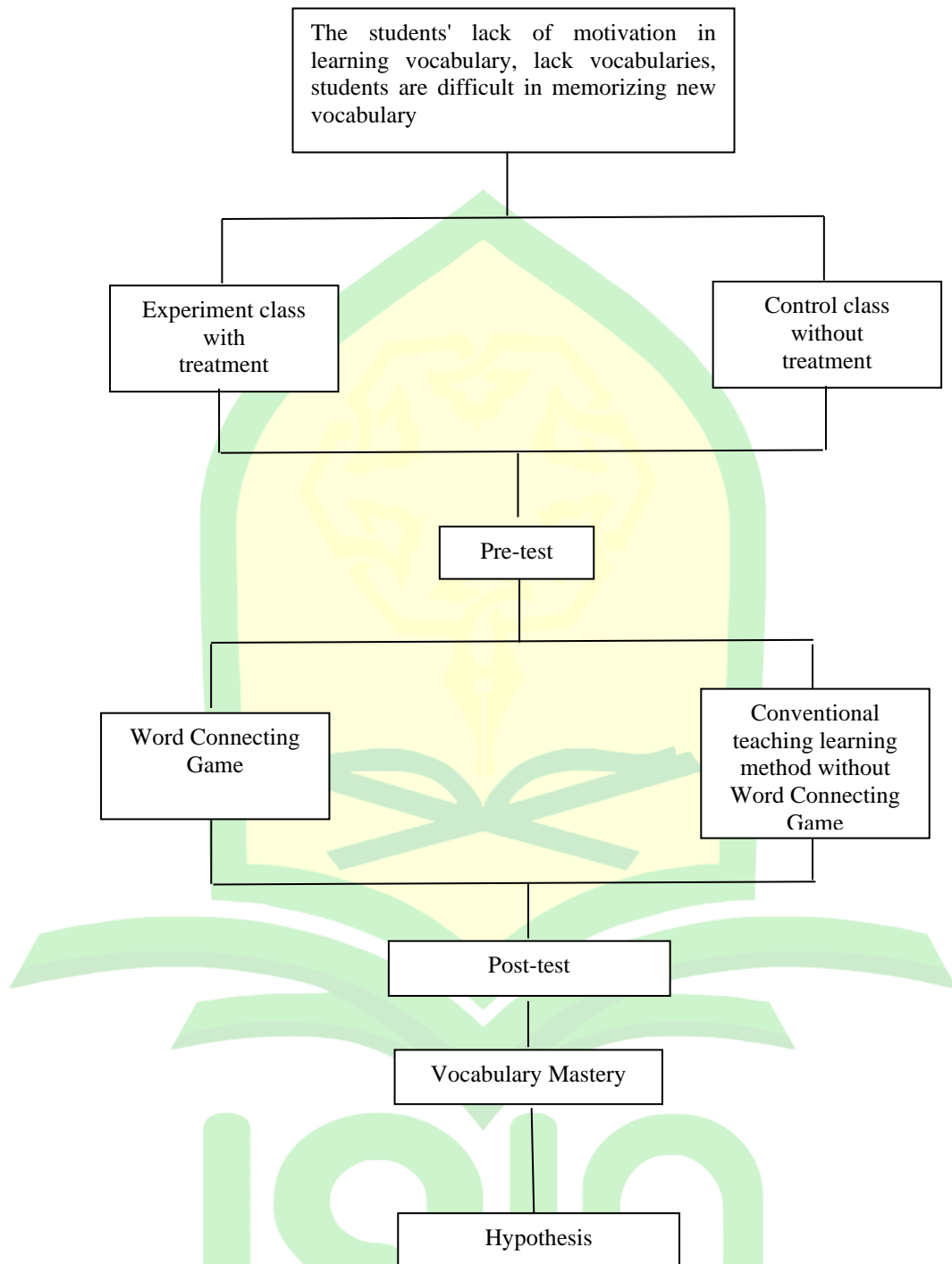


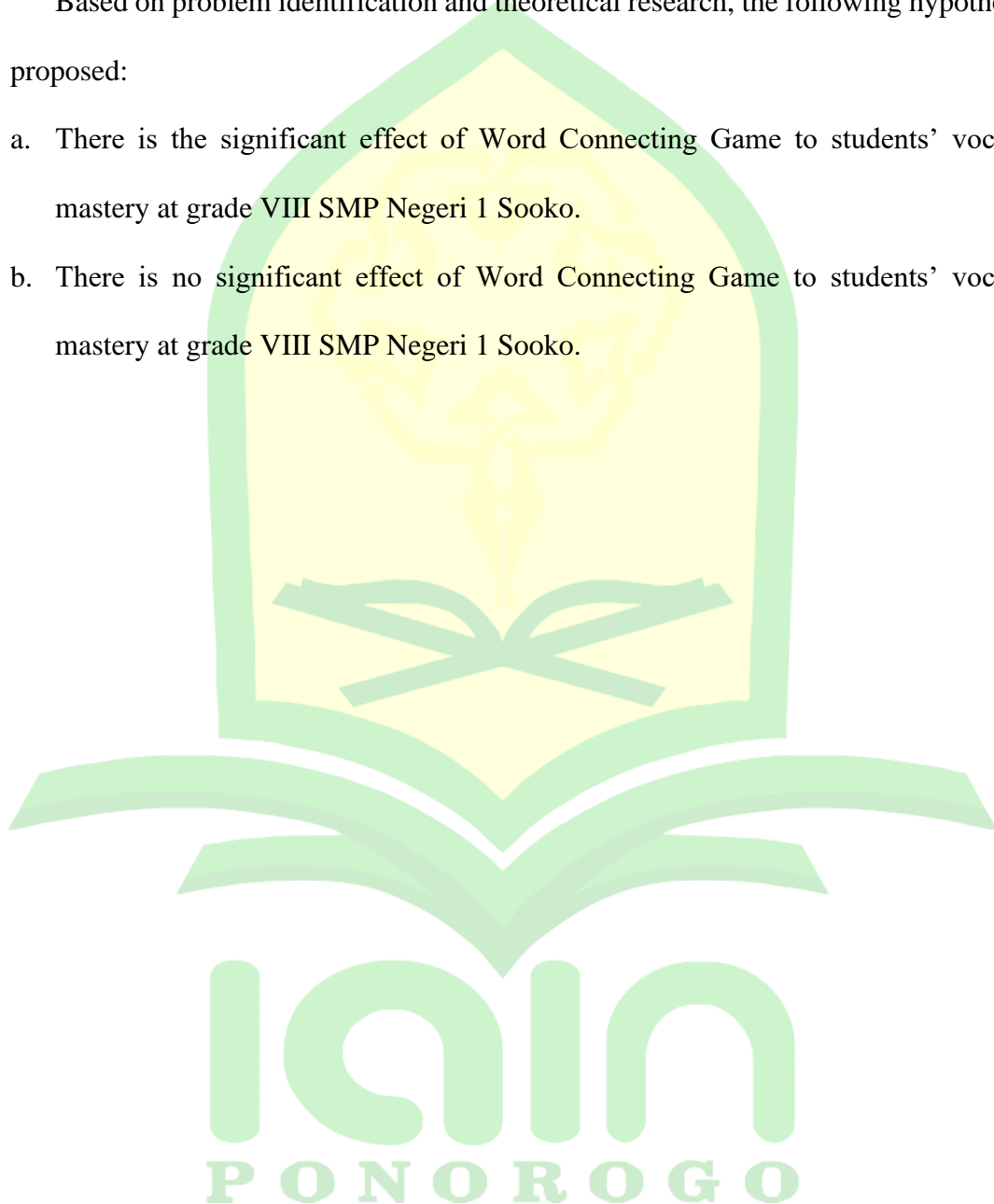
Figure 2.1. The Conceptual Framework Word Connecting Game

D. Research Hypothesis

Hypotheses are typically derived from theories or from knowledge gained while reviewing the related literature, which often leads the researcher to expect a certain finding.⁵³

Based on problem identification and theoretical research, the following hypotheses are proposed:

- a. There is the significant effect of Word Connecting Game to students' vocabulary mastery at grade VIII SMP Negeri 1 Sooko.
- b. There is no significant effect of Word Connecting Game to students' vocabulary mastery at grade VIII SMP Negeri 1 Sooko.



⁵³ L. R. Gay, Geoffrey E. Mills, and Peter Airasian, *Educational Research Competencies for Analysis and Applications*, Tenth Edition (America: Pearson, 2012), 70.

CHAPTER III

RESEARCH METHOD

A. Research Design

This research applies quantitative research. Quantitative research is an approach for testing objective theories by examining the relationship among variables.⁵⁴ Quantitative research is the collection and analysis of numerical data to describe, explain, predict, or control phenomena of interest.⁵⁵ Quantitative approaches emphasize measuring variables accurately and testing hypotheses related to common causal explanations. Quantitative research based on the measurement of the quantity or amount. It is applicable to phenomena that can be expressed in term of quantity.

In this research, researchers apply experimental research design. Experimental research seeks to determine if a specific treatment influences an outcome.⁵⁶ In this research, the researcher used two study subjects, a treated class group called the experimental class and a non-treated class group called the control class. The experimental class will learn about vocabulary mastery using the word connecting game. Before starting learning, the class is given a pre-test, then learning begins by using a word connecting game. After learning, a class evaluation (post-test) was carried out to determine the effect of word connecting games on students' vocabulary mastery in the experimental class and compared to the control class which was not given treatment.

The types of experimental designs include true experimental design, quasi-experimental design, pre-experimental design or factorial design. This research uses a quasi-experimental design. A quasi-experimental design was used because it is rather difficult in practice to form

⁵⁴ John W. Creswell and J. David Creswell, *Research Design Qualitative, Quantitative, and Mixed Methods Approaches: Fifth Edition* (Los Angeles: Sage, 2018), 44.

⁵⁵ Geoffrey E. Mills and L.R. Gay, *Educational Research Competencies for Analysis and Applications: Eleventh Edition* (Boston: Pearson, 2015), 24.

⁵⁶ John W. Creswell and J. David Creswell, *Research Design Qualitative, Quantitative, and Mixed Methods Approaches: Fifth Edition* (Los Angeles: Sage, 2018), 54.

a control group in the study. The procedure in quasi experimental research as follows:

1. Define the accessible population of the select two classes out of all the exiting classes which are of equivalent level.
2. Randomly select one of the classes into experimental group and other one the control group.
3. Give the experimental treatment to the experimental group and the control treatment to the control group.
4. Assess the results of the treatments of both groups.
5. Compute the difference between the average score of experimental group and control group.⁵⁷

In this quasi-experimental research, the researcher used a non-equivalent control group design. This design has a control group but cannot fully function to control external variables that affect the implementation of the experiment.

In this research design, the experimental and control groups were not randomly selected. The two groups underwent a pre-test to determine if there were differences in baseline conditions between the experimental and control groups. After treatment, both groups were tested with the same test as the final or post-test, the two results were compared.

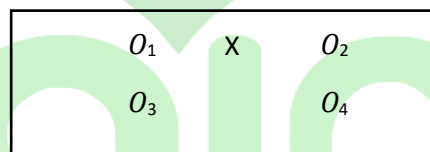


Figure 3.1. Non-equivalent Control Group Design

Where:

1 = Pre-test in the experimental class

⁵⁷ Mohammad Adnan Latief, "Research Method on Language Learning an Introduction," (Thesis, Universitas Negeri Malang, Malang, 2012), 94.

3 = Pre-test in the control class

X = Treatment

2 = Post-test in the experimental class

4 = Post-test in the control class⁵⁸

B. Research Setting

This research was conducted at SMP Negeri 1 Sooko Ponorogo. SMP Negeri 1 Sooko Ponorogo is located in Ds. Jurug, Kec. Sooko, Kab. Ponorogo.

The reasons for choosing this school are as follows:

1. Most students of SMP Negeri 1 Sooko do not yet have the motivation to learn English actively.
2. Most students of SMP Negeri 1 Sooko still have difficulty mastering English vocabulary.
3. Most students of SMP Negeri 1 Sooko still have difficulty mastering the four English skills, such as reading, writing, listening and speaking.

C. Population and Sample

1. Population

Population is a generalization area consisting of: objects/subjects that have certain qualities and characteristics determined by the researcher to be studied and then conclusions drawn.⁵⁹ From that statement it can be said that population is the entire research data subject.

The population in this research were students of class VIII at SMP Negeri 1 Sooko for the 2022/2023 academic year, which were divided into 5 classes. For more details, the population in this research can be seen in the following table:

⁵⁸ Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D* (Bandung: Alfabeta, 2017), 116.

⁵⁹ *Ibid*, 124.

**Table 3.1. The Population of The Grade VIII Students
in SMP Negeri 1 Sooko**

No.	Class	Students
1.	VIII-A	27
2.	VIII-B	27
3.	VIII-C	27
4.	VIII-D	28
5.	VIII-E	28
	Total	135

2. Sample

The sample is part or representative of the population being studied.⁶⁰ The sample is used to facilitate researchers in collecting data because the number of research objects is too much. Researchers used the Purposive Sample technique. Purposive Sampling is the process of selecting a sample that is believed to be representative of a given population.⁶¹ This consideration was based on the results of field observations in the form of daily test results in low English subjects which were supported by information provided by the English teacher who said that the two class groups that were sampled had the same characteristics as seen from the average test results as follows:

Table 3.2. The Average Score of English Daily Test 2022/2023 Academic Year

No.	Class	Average score
1.	VIII-A	74
2.	VIII-B	75
3.	VIII-C	88
4.	VIII-D	86
5.	VIII-E	79

Based on the test results table, it can be concluded that the average score of the results of the daily English test results in the previous material in class VIII-A and class VIII-B are the two classes with the lowest average score, class VIII-A with the average 74 and VIII-B with an average of 75.

⁶⁰ Suharsismi Arikunto, *Prosedur Penelitian* (Jakarta: PT. Rineka Cipta, 2014), 174.

⁶¹ Geoffrey E. Mills and L.R. Gay, *Educational Research Competencies for Analysis and Applications: Eleventh Edition* (Boston: Pearson, 2015), 166.

So, the researchers determined that class VIII-A was the experimental class using the Word Connecting Games and class VIII-B was the control class using the Jigsaw method.

Table 3.3. Sample of Class VIII-A and VIII-B SMP Negeri 1 Sooko Even Semester 2022/2023 Academic Year

No.	Class	Gender		Total
		Male	Female	
1.	Experimental class (VIII-A)	10	17	27
2.	Control class (VIII-B)	18	9	27
Total				54

D. Operational Research Variables

A variable refers to a characteristic or attribute of an individual or an organization that can be measured or observed and that varies among the people or organization being studied.⁶² The research variables in this study are divided into independent variables and dependent variables. Independent variables are those that influence, or affect outcomes in experimental studies.⁶³ While, the dependent variables are those that depend on the independent variables; they are the outcomes or results of the influence of the independent variables.⁶⁴

Based on the research title that the researcher wants to examine, the independent variables and the dependent variable in this study are as follows:

- a. Student Vocabulary as Dependent Variable (Y)
- b. Word Connecting Games as Independent Variables (X)

Besides that, the indicator of this research is the effectiveness of use word connecting game to get students' understanding of the words and they mean.

⁶² John W. Creswell and J. David Creswell, *Research Design Qualitative, Quantitative, and Mixed Methods Approaches: Fifth Edition* (Los Angeles: Sage, 2018), 106.

⁶³ *Ibid.*

⁶⁴ *Ibid.*

E. Data Collection Techniques and Instruments

1. Data Collection Techniques

Before collecting data, researchers need to make several preparations such as preparing research designs, selecting research location, consulting with the supervisors, arranging permits, initial on-site observations, gathering information and preparing research equipment such as syllabus, lesson plans, exam grids and exam questions. After all preparations are complete, researchers can start conducting research with data collection techniques as follows:

a. Test

The test is used to obtain data regarding the level of student mastery of a material. Tests are instruments or tools to collect data about the ability of research subjects by means of measurement, for example to measure the ability of research subjects to master certain subject matter.⁶⁵

The data obtained from the test results are used to answer research problems. The test items were first tested in a class other than the experimental class and the control class as many as 35 items in the form of multiple choices. This aims to determine the validity, level of difficulty of the item, the reliability of the item, and the discriminating level of the item.

If there are invalid test items, then the test will not be used in research. Tests in this research were carried out twice, namely as follows:

1) Pre-test

Pre-test is the initial test before the treatment is carried out on the research sample and is the first step in research. This aims to determine students' initial abilities in vocabulary mastery of verb 1 in the simple present tense and verb 2 in the simple past tense.

⁶⁵ Wina Sanjaya, *Penelitian Pendidikan: Jenis, Metode dan Prosedur* (Jakarta: KENCANA, 2013), 251.

2) Post-test

Post-test is the final test of the experiment after the treatment has been carried out. The post-test was carried out with the aim of obtaining sample scores in the experimental class after being given treatment in the form of the Word Connecting Game method for vocabulary mastery, and also in the control class after being taught using the Jigsaw method.

b. Documentation

Documentation is one way of collecting research data indirectly, data obtained through supporting documents related to the data to be studied. Document is a record of events that have passed, which can be in the form of writing, drawing, or someone's monumental works.⁶⁶ Documentation research is a way of obtaining data by reviewing written documents, which can be in the form of data, pictures, tables, diagrams.

In this research, the researcher needed documentation in the form of data on grade VIII students' daily test scores to find a suitable sample. Researchers took the lowest average test scores from the five classes to serve as the experimental class and control class. Besides that, in the implementation of learning in the experimental class (giving treatment) and the control class, the researcher also took some documentation in the form of photos for that.

2. Instruments

Research instruments are tools that are selected and used by researchers in their activities to collect data so that these activities become systematic.⁶⁷ The success of research is largely determined by the research instruments used, instruments as data

⁶⁶ Sugiyono, *Memahami Penelitian Kualitatif* (Bandung: CV Alfabeta, 2005), 82.

⁶⁷ Suharsimi Arikunto, *Dasar-dasar Evaluasi Pendidikan* (Jakarta: Rineka Cipta, 2020), 265.)

collection tools that must really be designed in such a way as to produce empirical data as it is. In this research, the researcher used the test as an instrument to collect data about students' vocabulary mastery.

The tests are instruments or tools to collect data about the ability of research subjects by means of measurement, for example to measure the ability of research subjects to master certain subject matter.⁶⁸ The research instrument that will be used in this research is a multiple-choice test that is intended to measure student learning outcomes.

The instrument test was carried out before the treatment and the initial test in data collection. The instrument test was carried out in an equivalent class outside the experimental class and control class. The test used before validation consisted of 35 items. Meanwhile, after the validity of the researcher only used 20 items. The test used in this research is a multiple-choice test which consists of four choices a, b, c, and d which can be seen in Appendix 6-13.

The instrument test aims to determine the validity and reliability of the tests or the instruments used are feasible to be used as pre-test and post-test. The instrument test was conducted in class VIII-C with 27 students as respondents.

F. Validity and Reliability

1. Validity

Validity refers to the degree to which a test measures what it is supposed to measure and thus permits appropriate interpretation of scores.⁶⁹ An instrument is said to be valid if it can reveal data from the variables studied correctly. The level of instrument validity indicates the extent to which the data collected does not deviate from the description of the variable in question.

⁶⁸ Wina Sanjaya, *Penelitian Pendidikan: Jenis, Metode dan Prosedur* (Jakarta: KENCANA, 2013), 251.

⁶⁹ Geoffrey E. Mills and L.R. Gay, *Educational Research Competencies for Analysis and Applications: Eleventh Edition* (Boston: Pearson, 2015), 186.

In this research, the researcher used item validity. Item validity is concerned with whether the test items are relevant to the measurement of the intended content area.⁷⁰ To test validity, researchers used IBM *Statistical Package for Social Sciences* (SPSS) 26.0 software application for windows. Every question that is valid or not can be seen at the probability score compared to a significant level of 0,05%. Each item is said to be valid if the probability is less than 0,05% or compared using the *r product moment* table with a significant level of 5% (0/05) with $df = n - 2$ ($27 - 2 = 25$ so $df = 0,381$).

The test consists of 35 items with a total of 20 valid items while 15 items are invalid. Valid test questions consist of 20 multiple choice questions with correct answers given a score of 1 and wrong answers given a score of 0. It can be seen in the Appendix 14 and 16.

2. Reliability

Reliability is the degree to which a test consistently measures whatever it is measuring.⁷¹ Instruments that can be trusted are reliable, produce data that can be trusted too, and in accordance with reality. So, if data collection is done several times, the results will be the same.

To get the reliability of the test, researchers used IBM *Statistical Package for Social Sciences* (SPSS) 26.0 software application for windows through *Cronbach's Alpha* testing. *Cronbach's Alpha* is a statistic commonly quoted by authors to demonstrate that tests and scales that have been constructed or adopted for research projects are fit for purpose.⁷² The instrument is said to be reliable if *Cronbach's Alpha* is $> 0,6$.⁷³ To interpret the degree of reliability of the evaluation tool, can be used the benchmarks as follows:⁷⁴

⁷⁰ *Ibid.*

⁷¹ *Ibid.*, 190.

⁷² Keith S. Taber, *The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education* (University of Cambridge: Cross Mark, 2018), 1273.

⁷³ Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan R & D.* (Bandung: Alfabeta, 2017), 220.

⁷⁴ Suharsimi Arikunto, *Dasar-Dasar Evaluasi Pendidikan* (Jakarta: Rineka Cipta, 2020), 319.

Table 3.4. Interpretation of the Reliability Coefficient

Coefficient of Reliability	Level of Reliability
$r_{11} \leq 0,20$	Very low
$0,20 < r_{11} \leq 0,40$	Low
$0,40 < r_{11} \leq 0,70$	Currently
$0,70 < r_{11} \leq 0,90$	High
$0,90 < r_{11} \leq 1,00$	Very high

The results of the analysis that has been carried out on 20 valid pre-test and post-test item tests, obtained a *Cronbach's Alpha* score of $0,631 > 0,6$ and is said to be reliable because *Cronbach's Alpha* $> 0,6$ is $0,631 > 0,6$ in the pre-test and has a currently level of reliability. Whereas in the post-test items, the *Cronbach's Alpha* score is $0,793 > 0,6$ and is said to be reliable because *Cronbach's Alpha* $> 0,6$ is $0,793 > 0,6$ and has a high level of reliability. The complete reliability calculation of the items can be seen in Appendix 15 and 17.

G. Data Analysis Technique

Researchers used data analysis techniques and pre-test and post-test designs. The data of this research were analyzed twice, there are after the pre-test and after the post-test. The difference between the results of the two tests is assumed to be the effect of the vocabulary learning method which focuses on verb 1 in the simple present tense and verb 2 in the simple past tense using Word Connecting Game.

The experimental research design was conducted by experimental and control classes. After the experimental process, the two classes were tested using data analysis techniques as follows:

1. Assumption Tests

a. Normality test

The normality test was carried out to find out whether the research data that had been obtained were normally distributed or not. The normality test can be seen from the data from the pre-test and post-test results.

The normality test for the results of the pre-test and post-test data used is the *Kolmogorov-Smirnov* test using the *IBM Statistical Package for Social Sciences* (SPSS) 26.0 software application for windows with a significant level of 5% or 0,05. The *Kolmogorov-Smirnov* is based on the largest vertical difference between the hypothesized and empirical distribution.⁷⁵ The researcher chose the *Kolmogorov-Smirnov* test because the sample in the study was (>30) respondents. The decision criterion in the normality test in SPSS is if the significance score is (>0,05), then the data is normally distributed whereas if the significance score is (< 0.05) then the data is not normally distributed.

After the normality test was carried out using the *Kolmogorov-Smirnov* test and it was stated that the data were normally distributed, then it was continued with a two-variance homogeneity test on the results of the pre-test and post-test data using the *Levene* test with the *IBM Statistical Package for Social Sciences* (SPSS) 26.0 software application for windows.

b. Homogeneity test

Homogeneity test is carried out to determine whether the test data variant is homogeneous or not homogeneous. Test the homogeneity of the two variants on the results of the pre-test and post-test data using the *Levene* test with the *IBM Statistical Package for Social Sciences* (SPSS) 26.0 software application for

⁷⁵ Nornadiah Mohd Razali and Bee Wah Yap, "Power Comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling Tests," *Journal of Statistical Modeling and Analytics*, 2, 1 (2011): 23.

windows with a significant level of 5% or 0,05. The decision criterion in the homogeneity test in SPSS is if the significance score ($> 0,05$) means that the data is said to be homogeneous, while if the significance score ($< 0,05$) means that the data is not homogeneous.

After the homogeneity test was carried out using the *Levene* test and it was obtained from the test results that the data of the two groups had the same variance, then it was carried out with the similarity of hypothesis testing using the *Paired Samples T-Test*.

2. Hypothesis test

This hypothesis test is carried out after testing for normality and homogeneity with a normal and homogeneous distribution, then the analysis is continued with hypothesis testing using the *Paired Samples T-Test* or *Independent Samples T-Test*. An *Independent Samples T-Test* assesses whether the means of two groups are statistically different from each other.⁷⁶ This technique is used to compare the difference between the two means of two paired samples assuming the data is normally distributed.

Paired Samples T-Test or *Independent Samples T-Test* using I IBM *Statistical Package for Social Sciences* (SPSS) 26.0 software application for windows with a significant level of 0,05. With the decision criteria in the *Paired Samples T-Test* on SPSS, there are if the significance score (2-tailed) $< 0,05$, then it indicates that there is a significant difference between the initial variable and the final variable. This shows that there is a significant effect on the difference in the treatment given to each variable. Meanwhile, if the significance score (2-tailed) $> 0,05$, it indicates that there is no significant difference between the initial variable and the final variable. This shows

⁷⁶ Daniel Stockermer, *Quantitative Methods for the Social Science: A Practical Introduction with Examples in SPSS and Stata* (Ontario: Springer International Publishing, 2019), 101.

that there is no significant effect on the difference in the treatment given to each variable.



CHAPTER IV

FINDINGS AND DISCUSSION

A. Research Location

This research was conducted at SMPN 1 Sooko Ponorogo in academic year 2022/2023. The location of SMPN 1 Sooko Ponorogo is located on the Ds. Jurug, Kec. Sooko, Kab. Ponorogo.

1. History Background of SMPN 1 Sooko

Based on the Decree of the Minister of Education and Culture of the Republic of Indonesia No: 0188/0/1979 concerning the Opening, Unification, and Enrollment of Junior High Schools, it was decided that starting from April 01st, 1979, SMP Negeri 1 Sooko Ponorogo was established.

The village head of Jurug, Mr. Soedjadi, together with the community supports the existence of a new junior high school. Mr. Soedjadi donated crooked rice fields as land for the school building. The rice field area is called the Kenthi rice field which is located in the village of Jurug, Sooko sub-district. The geographical location is quite strategic near the Sooko sub-district office, which later became SMP Negeri 1 Sooko.

At the beginning of its establishment, SMP Negeri 1 Sooko had 9 classrooms. There is no electricity and telephone yet, there are no fences, the condition of the land still looks dry as a former rice field area, and also the weather is hot. The first term principal at SMP Negeri 1 Sooko was Mr. Soekardi, followed by Mr. Moeljadi, Mr. R. Wahyu Wirawan, Mr. Umar Said, S.Pd., Drs. Soerjono, Mr. Bambang Soeharjo, Mr. Sudarmadi, S.Pd., Mr. Dwi Ramelan, Mr. Katiran, Drs. Suseno, Mr. Himawan Setyono, S.Pd., and currently SMPN 1 Sooko is led by Mr. Suhadi, M.Pd.

2. Vision, Missions, and Goals of SMPN 1 Sooko

a. Vision

Realizing students who are faithful and pious, intelligent, with character, and cultured in the environment.

b. Missions

- 1) Carry out learning activities both intra-curricular and extra-curricular that develop spiritual potential and the habit of carrying out religious teachings in accordance with their individual beliefs.
- 2) Implement and develop a tolerant attitude and behavior towards adherents of religion.
- 3) Carrying out learning that is able to develop each potential student through IT-based learning, critical thinking habits, communication habits and polite opinions, counseling guidance services and school literacy movements.
- 4) Carry out learning that integrates the realization of Pancasila student profiles.
- 5) Carry out Pancasila student profile project activities.
- 6) Getting used to living clean, healthy, organized and like to work hard, and have life skills that can be developed in life in society.
- 7) Implementing child-friendly and disaster-safe schools.
- 8) Fostering and developing a culture of fond of reading, preserving the environment, preventing pollution and environmental damage.
- 9) Building networks with parents/guardians of students, communities and other educational institutions.

c. Goals

- 1) The realization of students who believe and fear God Almighty.
- 2) Realization of students who have a tolerant attitude and behavior towards adherents of religion.

- 3) Realization of students in accordance with the demands of graduate competency standards.
- 4) The realization of students who have the ability to think critically, dare to argue, communicate politely and have noble character.
- 5) Increasing the achievement of educational report cards through increasing AKM results.
- 6) Increasing the achievement of obtaining academic and non-academic championship titles both at the district/provincial and national levels.
- 7) The realization of students who have character values in accordance with the Pancasila student profile.
- 8) Implementation of Pancasila student profile project activities.
- 9) The growth and development of a culture of fondness for efforts to preserve the environment, prevent pollution, and prevent environmental damage.
- 10) Building a good network or collaboration with parents/guardians of students, the community and other educational institutions.

B. Data Description

The researcher used a quasi-experimental research design in this research. The population of this research was class VIII students of SMPN 1 Sooko Ponorogo for the 2022/2023 academic year. Researcher took two classes as sample, the first class as an experimental class that would be given pre-test, treatment and post-test. For the second class as the control class, only pre-test and post-test were given without treatment. These classes are VIIIA for the experimental class and VIIIB as the control class.

Students are taught using the Word Connecting Game in the experimental class (VIIIA). Then, in the control class students were taught by conventional methods as usual. The first step the researcher gave the pre-test to both classes in the form of 20 items about verbs 1 and verb 2, the second the researcher applied the treatment using a Word Connecting Game for students'

vocabulary mastery on verb material (simple present tense and simple past tense) in the experimental class and without Word Connecting Game in the control class. At the end of the research, the researcher compared the students' vocabulary mastery scores by giving a post-test which contained 20 items about the subject matter of verb 1 in the simple present tense and verb 2 in the simple past tense.

1. Schedule of the Research

The researcher used two groups of pre-test and post-test in this research for eighth grade students. For the experimental class schedule, the researcher needs four meetings. The first meeting was a pre-test, the second and third meetings were done with Word Connecting Game and the fourth meeting was a post-test. Furthermore, in the control class, the control class schedule is the same as the experimental class. Students are given a pre-test at the first meeting, the second and third meetings are given learning materials using conventional methods as usual and the fourth meeting is a post-test. The experimental and control class schedules can be seen in the table below:

Table 4.1. Research Schedule of Experimental Class

Date	Activities
February, 07 th 2023	Pre-test
February, 14 th 2023	First meeting with treatment
February, 21 th 2023	Second meeting with treatment
February, 28 th 2023	Post-test

Table 4.2. Research Schedule of Control Class

Date	Activities
February, 09 th 2023	Pre-test
February, 16 th 2023	First meeting without treatment
February, 23 th 2023	Second meeting without treatment
March, 02 nd 2023	Post-test

2. Teaching Procedures in Experimental Class and Control Class

In this research the researchers took class VIIIA as the experimental class and class VIIIB as the control class.

a. Teaching Procedures of Experimental Class

1) First meeting

At this meeting, the researcher introduced herself and explained to the students the purpose of her presence. The researcher asked students about the material that students had learned in the previous meeting. The researcher also conveyed a plan of activities that students would carry out during the research process. Then, the researcher gave the students a pre-test sheet to find out the condition of the students before the researcher applied the treatment and did not forget to give clear instructions to the students before doing the pre-test.

The pre-test consists of 20 items that students must work on for 25 minutes. After completing the test, the researcher gave a basic introduction to the simple present tense and simple past tense material. At the end of the course, researchers reflect on learning and provide motivation to students.

2) Second meeting

The researcher came to class and greeted the students to start the second meeting. Next, the researcher introduces and explains the simple present tense which focuses on verb 1, starting from definitions, formulas, adverbs of time, functions and examples.

After the researcher finished giving the explanation to the students, the researcher started to do the treatment with a word connecting game which would focus on verb 1. This game would help students to master more vocabulary so that it would make it easier for students to make a sentence, especially simple present

tense sentences. In this research focused on verbs that are appropriate to the eighth-grade learning material. The steps for word connecting game are as follows:

- a) Students are divided into several groups. The division of groups must be fair. For example, if there are 30 students, the teacher will make 3 groups, where in one group there are 10 students.
- b) Each group will be given about 5-10 minutes to play by writing each word they choose on the board.
- c) Choose a verb category, for example verb 1.
- d) The first player can use the word “Put”, then one of the other players writes another verb 1 that starts with the last letter of the previous word.
- e) “T” as the last letter of the word “Put” will be the first letter of the next verb 1. The next player may write the word “Take”. Then, he asks another player to write down another verb 1, where the verb 1 initial name is “E”. “E” is the last letter of the word “Take”.
- f) Players will be out of the game if unable to give the correct answer.
- g) The group with the most words and the correct answers is the winner and gets a prize from the teacher (researcher).
- h) The final result of the word connecting game will form a word chain as shown below:

put take eat talk knit try saw nail load dance...

Figure 4.1. Final Result of Word Connecting Game About Verb 1

3) Third meeting

The researcher came to class and greeted the students to start the third meeting. Next, the researcher introduces and explains the simple past tense which

focuses on verb 2, starting from definitions, formulas, adverbs of time, functions and examples.

After the researcher finished giving the explanation to the students, the researcher started to do the treatment with a word connecting game which would focus on verb 2. This game would help students to master more vocabulary so that it would make it easier for students to make a sentence, especially simple past tense sentences. In this research focused on verbs that are appropriate to the eighth-grade learning material. The steps for word connecting game are as follows:

- a) Students are divided into several groups. The division of groups must be fair. For example, if there are 30 students, the teacher will make 3 groups, where in one group there are 10 students.
- b) Each group will be given about 5-10 minutes to play by writing each word they choose on the board.
- c) Choose a verb category, for example verb 2.
- d) The first player can use the word "Found", then one of the other players writes another verb 1 that starts with the last letter of the previous word.
- e) "D" as the last letter of the word "Found" will be the first letter of the next verb 2. The next player may write the word "Dug". Then, he asks another player to write down another verb 2, where the verb 2 initial name is "G". "G" is the last letter of the word "Dug".
- f) Players will be out of the game if unable to give the correct answer.
- g) The group with the most words and the correct answers is the winner and gets a prize from the teacher (researcher).
- h) The final result of the word connecting game will form a word chain as shown below:

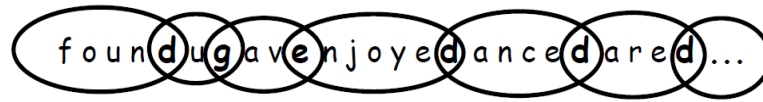


Figure 4.2. Final Result of Word Connecting Game About Verb 2

4) Fourth meeting

At the last meeting, the researcher gave the students a post-test to see how they improved after the treatment, as a comparison with the pre-test. Before doing the post-test, the researcher gave clear instructions to the students. The post-test is also in the form of multiple-choice questions about simple present tense (verb 1) and simple past tense (verb 2) consisting of 20 items.

After students finished working on the post-test, the researcher provided feedback or evaluation of student learning activities for four meetings.

b. Teaching Procedures of Control Class

1) First meeting

At this meeting, the researcher introduced herself and explained to the students the purpose of his presence. The researcher asked the students about the material that had been studied by the students in the previous meeting. The researcher also submitted a plan of activities that students would carry out during the research process. Then the researcher gave the pre-test sheet to the students to find out the condition of the students before the researcher implemented the learning activities at the third and fourth meeting and did not forget to give clear instructions to the students before doing the pre-test.

The pre-test consists of 20 items that students must work on for 25 minutes. After completing the test, the researcher gave a basic introduction to the simple present tense and simple past tense material. At the end of the course, the researcher reflects on learning and provides motivation to students.

2) Second meeting

At the second meeting, the researcher started the lesson by greeting and conveying the activity plan. Then the researcher delivered the simple present tense material (verb 1) by dividing students into 5 groups. Each group must appoint a group leader. After that the researcher began to provide learning material by providing an overview and explaining the simple present tense which focused on verb 1. After delivering the material, each group of students was assigned to find deeper information about the definition of simple present tense, formulas, types, adverb of time, and function.

After each group of students completed their task, the researcher assigned the group leader to come forward alternately and present the results of the discussion from each group.

3) Third meeting

At the third meeting, the researcher started the lesson by greeting and conveying the activity plan. Then the researcher delivered the simple past tense material (verb 2) by dividing the students into 5 groups. The learning activities are the same as in the previous meeting, only in this meeting the learning material is in the form of simple past tense which focuses on verb 2.

4) Four meeting

At the last meeting, the researcher gave the students a post-test to see how they improved after the treatment, as a comparison with the pre-test. Before doing the post-test, the researcher gave clear instructions to the students. The post-test is also in the form of multiple-choice questions about simple present tense (verb 1) and simple past tense (verb 2) consisting of 20 items.

After students finished working on the post-test, the researcher provided feedback or evaluation of student learning activities for four meetings.

3. Students Score of Pre-test in Experimental Class and Control Class

a. Score of Pre-test in Experimental Class

In the pre-test of the experimental class, the researcher calculated the results obtained when the student answered the test before the treatment using the Word Connecting Game. The pre-test consists of 20 items with correct answers given a score of 1 and wrong answers given a score of 0. Pre-test scores in the experimental class can be seen in the following table:

Table 4.3. The Score of Pre-test in Experimental Class

Total score	1370
Highest score	60
Lowest score	40
Mean	50,74
Median	50
Mode	55
Range	20
Standard deviation	6,192
Variants	38,34
Interval	3

Based on the table above, the total pre-test score in the experimental class was 1370, mean 50,74, standard deviation 6,192, variance 38,34, median 50, range 20, mode 55, interval 3. Highest score in the experimental class was 60, while the lowest score was 40. This calculation can be seen in Appendix 20.

Next is the calculation of the frequency distribution of student learning outcomes in the experimental class which can be seen in the frequency distribution table as follows:

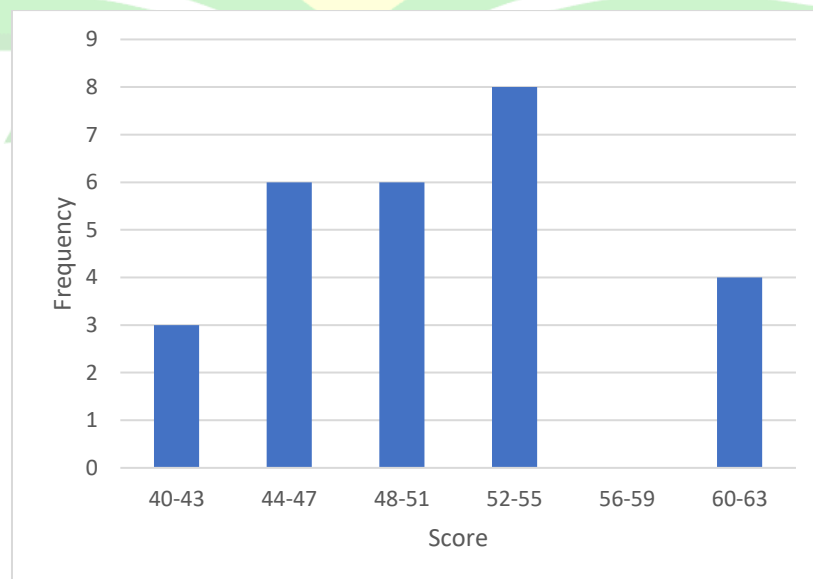
P O N O R O G O

Table 4.4. Frequency Distribution of Pre-test in Experimental Class

No.	Interval	Frequency	Percentages
1.	40-43	3	11%
2.	44-47	6	22%
3.	48-51	6	22%
4.	52-55	8	30%
5.	56-59	0	0%
6.	60-63	4	15%
		27	100%

From the frequency distribution table above, it can be seen that the student scores in the 40-43 interval class are 3 students (11%), the 44-47 interval class are 6 students (22%), the 48-51 interval class are 6 students (22%), interval class between 52 – 55 with 8 students (30%), interval class between 56 – 59 is no student (0%), and last class interval between 60 – 63 with 4 students (15%).

To get a clearer and more complete picture of the data, the researcher presents it in the form of a histogram as follows:

**Figure 4.3. Description Data Pre-test of Experimental Class**

In the histogram of experimental class student scores in the pre-test, the lowest interval is 40-43 for 3 students and the highest is 60-63 for 4 students. The histogram also shows the highest frequency at intervals of 52-55 from 8 students.

b. Score of Pre-test in Control Class

In the pre-test of the control class, the researchers calculated the results that the students received when answering the test. The pre-test consists of 20 items with correct answers given a score of 1 and wrong answers given a score of 0. Pre-test scores in the control class can be seen in the following table:

Table 4.5. The Score of Pre-test in Control Class

Total score	1340
Highest score	60
Lowest score	40
Mean	49,63
Median	50
Mode	55
Range	20
Standard deviation	6,929
Variants	48,01
Interval	3

Based on the table above, the total pre-test score in the control class was 1340, mean 49,63, standard deviation 6,929, variance 48,01, median 50, range 20, mode 55, interval 3. Highest score in the experimental class was 60, while the lowest score was 40. This calculation can be seen in Appendix 20.

Next is the calculation of the frequency distribution of student learning outcomes in the control class which can be seen in the frequency distribution table as follows:

Table 4.6. Frequency Distribution of Pre-test in Control Class

No.	Interval	Frequency	Percentages
1.	40-43	6	22%
2.	44-47	5	19%

3.	48-51	5	19%
4.	52-55	7	26%
5.	56-59	0	0%
6.	60-63	4	15%
		27	100%

From the frequency distribution table above, it can be seen that the student scores in the 40-43 interval class are 6 students (22%), the 44-47 interval class are 5 students (19%), the 48-51 interval class are 5 students (19%), interval class between 52 – 55 with 7 students (26%), interval class between 56 – 59 is no student (0%), and last class interval between 60 – 63 with 4 students (15%).

To get a clearer and more complete picture of the data, the researcher presents it in the form of a histogram as follows:

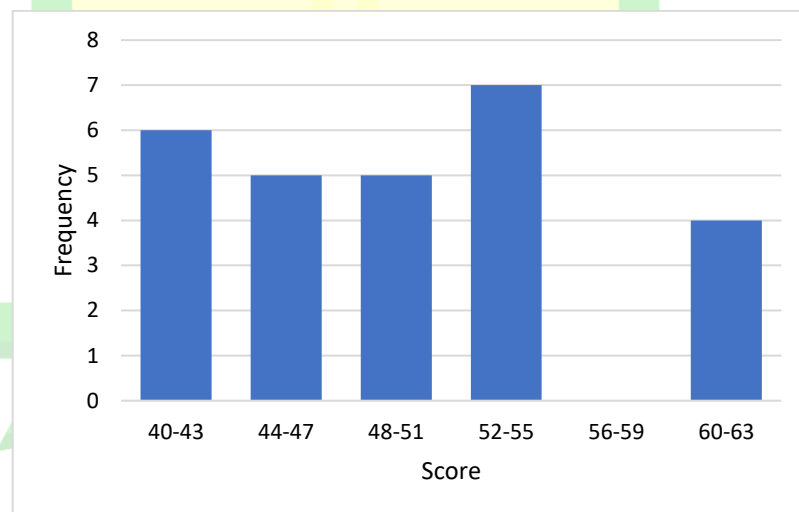


Figure 4.4. Description Data Pre-test of Control Class

In the histogram of control class student scores in the pre-test, the lowest interval is 40-43 for 6 students and the highest is 60-63 for 4 students. The histogram also shows the highest frequency at intervals of 52-55 from 7 students.

4. Students Score of Post-test in Experimental Class and Control Class

a. Score of Post-test in Experimental Class

In the post-test of the experimental class, the researcher calculated the results obtained when the student answered the test after the treatment using the Word Connecting Game. The post-test also consists of 20 items with correct answers given a score of 1 and wrong answers given a score of 0. The experimental class scores after testing can be found in the following table:

Table 4.7. The Score of Post-test in Experimental Class

Total score	2055
Highest score	85
Lowest score	65
Mean	76,11
Median	75
Mode	75
Range	20
Standard deviation	6,431
Variants	41,36
Interval	3

Based on the table above, the total post-test score in the experimental class was 2055, mean 76,11, standard deviation 6,431, variance 41,36, median 75, range 20, mode 75, interval 3. Highest score in the experimental class was 85, while the lowest score was 65. This calculation can be seen in Appendix 21.

Next is the calculation of the frequency distribution of student learning outcomes in the experimental class which can be seen in the frequency distribution table as follows:

Table 4.8. Frequency Distribution of Post-test in Experimental Class

No.	Interval	Frequency	Percentages
1.	65-68	3	11%
2.	69-72	5	19%

3.	73-76	8	30%
4.	77-80	5	19%
5.	81-84	0	0%
6.	85-88	6	22%
		27	100%

From the frequency distribution table above, it can be seen that the student scores in the 65-68 interval class are 3 students (11%), the 69-72 interval class are 5 students (19%), the 73-76 interval class are 8 students (30%), interval class between 77-78 with 5 students (19%), interval class between 81 – 84 is no student (0%), and last class interval between 85 – 88 with 6 student (22%).

To get a clearer and more complete picture of the data, the researcher presents it in the form of a histogram as follows:

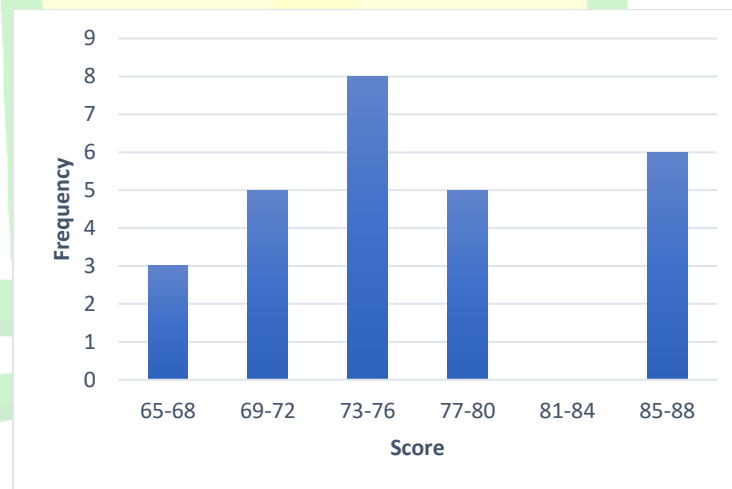


Figure 4.5. Description Data Post-test of Experimental Class

In the histogram of experimental class student scores in the post-test, the lowest interval is 65-68 for 3 students and the highest is 85-88 for 6 students. The histogram also shows the highest frequency at intervals of 73-76 from 8 students.

b. Score of Post-test in Control Class

In the post-test of the control class, the researcher calculated the results obtained when the student answered the test after the learning using the Jig-Saw method. The post-test also consists of 20 items with correct answers given a score of 1 and wrong

answers given a score of 0. The experimental class scores after testing can be found in the following table:

Table 4.9. The Score of Post-test in Control Class

Total score	1515
Highest score	75
Lowest score	40
Mean	56,11
Median	55
Mode	60
Range	35
Standard deviation	8,642
Variants	74,69
Interval	6

Based on the table above, the total post-test score in the control class was 1515, mean 56,11, standard deviation 8,642, variance 74,69, median 55, range 35, mode 60, interval 6. Highest score in the control class was 75, while the lowest score was 40. This calculation can be seen in Appendix 21.

Next is the calculation of the frequency distribution of student learning outcomes in the control class which can be seen in the frequency distribution table as follows:

Table 4.10. Frequency Distribution of Post-test in Control Class

No.	Interval	Frequency	Percentages
1.	40-46	6	22%
2.	47-53	3	11%
3.	54-60	13	48%
4.	61-67	2	7%
5.	68-74	2	7%
6.	75-81	1	4%
		27	100%

From the frequency distribution table above, it can be seen that the student scores in the 40-46 interval class are 6 students (22%), the 47-53 interval class are 3 students

(11%), the 54-60 interval class are 13 students (48%), interval class between 61-67 with 2 students (7%), interval class between 68-74 with 2 students (7%), and last class interval between 75-81 with 1 student (4%).

To get a clearer and more complete picture of the data, the researcher presents it in the form of a histogram as follows:

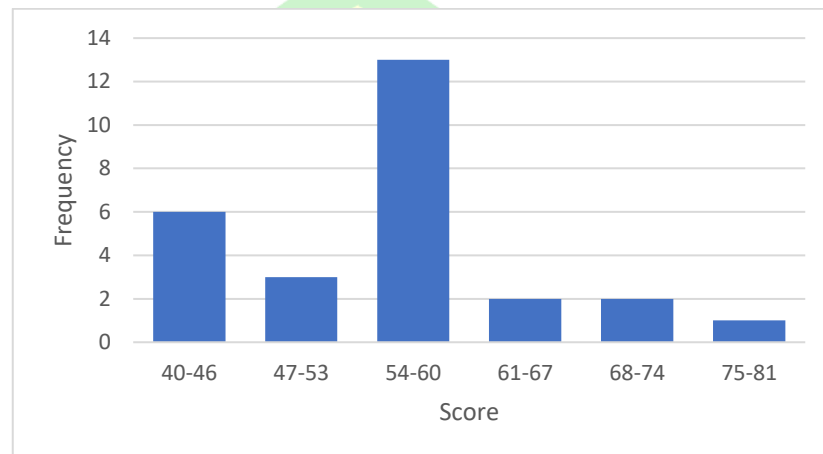


Figure 4.6. Description Data Post-test of Control Class

In the histogram of control class student scores in the post-test, the lowest interval is 40-46 for 6 students and the highest is 75-81 for 1 student. The histogram also shows the highest frequency at intervals of 54-60 from 13 students.

5. The Description of Comparison Data of Pre-test and Post-test

a. The Comparison Data of Pre-test and Post-test in Experimental Class

A comparison of the pre-test and post-test data for the experimental class can be seen in the following table:

Table 4.11. The Comparison Data of Experimental Class in Pre-test and Post-test

Description	Pre-test	Post-test
Total score	1370	2055
Highest score	60	85
Lowest score	40	65
Mean	50,74	76,11
Median	50	75

Mode	55	75
Range	20	20
Standard deviation	6,192	6,431
Variants	38,34	41,36
Interval	3	3

Based on the students' answers on the experimental class in pre-test and post-test, the researchers calculated the students' scores, and most of the students in both grades had poor vocabulary mastery. The experimental class consisted of 27 students (VIII-A). The lowest score before the test was 40 points, the highest score was 60 points, the lowest score after the test was 65 points, and the highest score was 85 points.

To obtain a clear and complete description of the pre-test and post-test data for the experimental class, the researchers present the histograms as follows:

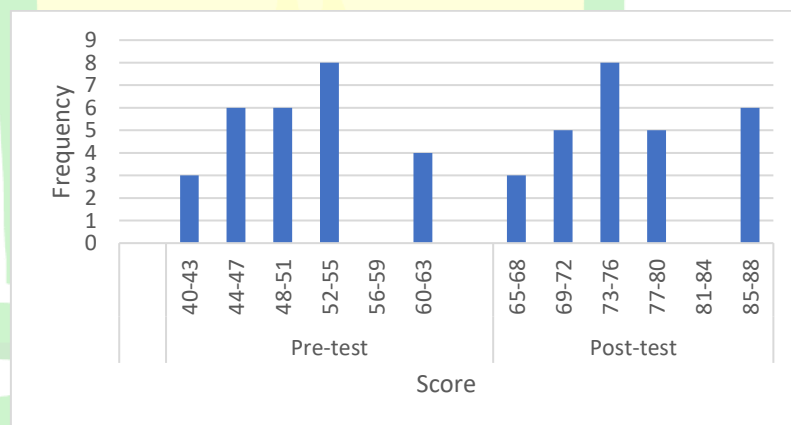


Figure 4.7. Comparison between Pre-test and Post Test in Experimental Class

From the histogram above, the pre-test frequency for student scores between 40 and 43 was 3 students, 44 to 47 was 6 students, 48-51 has 6 students, 52-55 has 8 students, 56-59 is no student, and between 60-63 has 4 students. On the post-test, the frequency of scores for students between 65 and 68 was 3, 69 to 72 was 5, 73 to 76 was 8, 77 to 80 was 5, 81-84 is no student, and 6 from 85 to 88. The histogram shows that the highest interval (85-88) in post-test was 6 students and the lowest interval (40-43) in pre-test was 3 students.

Therefore, students' performance in the experimental class was higher on the post-test than on the pre-test.

b. The Comparison Data of Pre-test and Post-test in Control Class

A comparison of the pre-test and post-test data for the control class can be seen in the following table:

Table 4.12. The Comparison Data of Control Class in Pre-test and Post-test

Description	Pre-test	Post-test
Total score	1340	1515
Highest score	60	75
Lowest score	40	40
Mean	49,63	56,11
Median	50	55
Mode	55	60
Range	20	35
Standard deviation	6,929	8,642
Variants	48,011	74,69
Interval	3	6

Based on the students' answers on the control class in pre-test and post-test, the researchers calculated the students' scores, and most of the students in both grades had poor vocabulary mastery. The control class consisted of 27 students (VIII-B). The lowest score before the test was 40 points, and the highest score was 60 points, the lowest score after the test was 40 points, and the highest score was 75 points.

To obtain a clear and complete description of the pre-test and post-test data for the control class, the researchers present the histograms as follows:

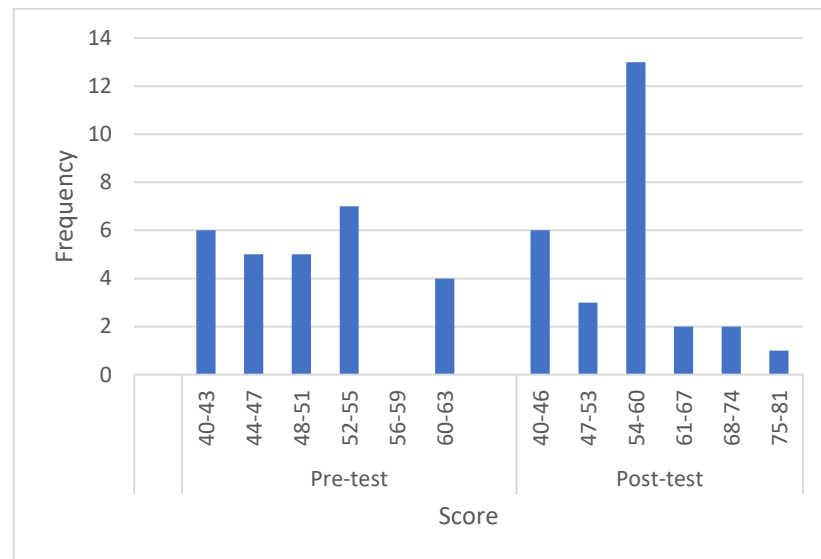


Figure 4.8. Comparison between Pre-test and Post Test in Control Class

From the histogram above, the pre-test frequency for student scores between 40 and 43 was 6 students, 44 to 47 was 5 students, 48-51 has 5 students, 52-55 has 7 students, 56-59 is no student, and between 60-63 has 4 students. On the post-test, the frequency of scores for students between 40 and 46 was 6, 47 to 53 was 3, 54 to 60 was 13, 61 to 67 was 2, 2 from 68 to 74 and 1 from 75 to 81. The histogram shows that the highest interval (75-81) in post-test was 1 student and the lowest interval (40-43) in pre-test was 6 students. Therefore, students' performance in the control class was higher on the post-test than on the pre-test.

c. The Comparison Data between Experimental and Control Class in Post-test

Based on the students' answers to the post-tests in the experimental and control class, the researchers calculated the scores for the students, with most students improving in both classes. The experimental class consisted of 27 students (VIII-A) with a lowest score of 65 and a highest score of 90. After that, most of the students improved their grades significantly. The control class consisted of 27 students (VIII-B) with a lowest score of 40 and a highest score of 75. Student scores also increased, but not significantly. To more easily describe the data, researchers present them in the form of histograms as follows:

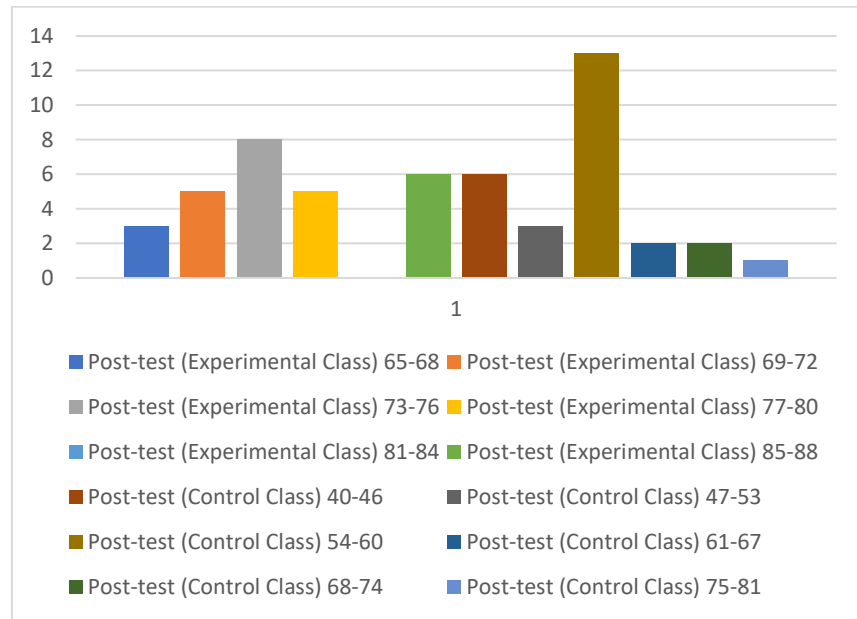


Figure 4.9. Comparison between Experimental and Control Class in Post-test

From the histogram above, the frequency of scores for students between 65 and 68 was 3 in the experimental class, 69 to 72 was 5, 73 to 76 was 8, 77 to 80 was 5 students, 81 to 84 is no student, and 85 to 88 was 6 students. In the control class, the frequency of student scores between 40 and 46 was 6, 47 to 53 was 3, 54 to 60 was 13, 61 to 67 was 2, 68 to 74 was 2, and 75 to 81 were 1 student.

C. Inferential Statistics

1. Assumption Tests

a. Normality and Homogeneity Pre-test

1) Normality of Experimental Class and Control Class in Pre- test

Table 4.13. Normality and Homogeneity in Pre-test

Class	Normality Test	Homogeneity Test
	(sig = 0,05)	
Experimental Class	0,010 > 0,05	0,440 > 0,05
Control Class	0,020 > 0,05	

This normality test was carried out using the *Kolmogorov-Smirnov* test with a significance level of 0,05 or 5%. So, based on the calculation table above, the score for the experimental class is 0,010, which means that the score is higher than 0,05 (0,010 > 0,05).

So, it can be said that the pre-test normality test in the experimental class is normally distributed. While the score for the control class was 0,020, which means that the score was also higher than 0,05 ($0,020 > 0,05$), it can be said that the pre-test normality test in the control class was also normally distributed. This calculation can be seen in Appendix 22.

2) Homogeneity of Experimental Class and Control class in Pre- test

In this research the homogeneity test used the *Levene* test where the significance level was 5% or 0,05. To find out the homogeneity score, the researcher must look at the score in the column *based on mean* in SPSS. In the table above the pre-test scores for the experimental class and the control class in the homogeneity test were 0,440, which means higher than 0,05 ($0,440 > 0,05$) so the score is homogeneous.

So, the researcher concluded that the variance of the data on the vocabulary mastery of students of SMPN 1 Sooko in the experimental class and the control class was homogeneous. The calculation can be seen in Appendix 23.

b. Normality and Homogeneity Post-test

1) Normality of Experimental Class and Control class in Post-test

Table 4.14. Normality and Homogeneity in Post-test

Class	Normality Test	Homogeneity Test
	(sig = 0,05)	
Experimental Class	0,074 > 0,05	0,163 > 0,05
Control Class	0,110 > 0,05	

This normality test was carried out using the *Kolmogorov-Smirnov* test with a significance level of 0,05 or 5%. So, based on the calculation table above, the score for the experimental class is 0,074, which means that the score is higher than 0,05 ($0,074 > 0,05$).

So, it can be said that the post-test normality test in the experimental class is normally distributed. While the score for the control class was 0,110, which means that the score was also higher than 0,05 ($0,110 > 0,05$), it can be said that the post-test normality test in the control class was also normally distributed. This calculation can be seen in Appendix 22.

2) Homogeneity of Experimental Class and Control class in Post-test

In this research the homogeneity test used the *Levene* test where the significance level was 5% or 0,05. To find out the homogeneity score, the researcher must look at the score in the column *based on mean* in SPSS. In the table above the post-test scores for the experimental class and the control class in the homogeneity test were 0,163, which means higher than 0,05 ($0,163 > 0,05$) so the score is homogeneous.

So, the researcher concluded that the variance of the data on the vocabulary mastery of students of SMPN 1 Sooko in the experimental class and the control class was homogeneous. The calculation can be seen in Appendix 23.

2. Hypothesis Testing and Interpretation

This hypothesis test is carried out after testing for normality and homogeneity with a normal and homogeneous distribution, then the analysis is continued with hypothesis testing using the *Paired Samples T-Test*. This technique is used to test whether certain results are significantly different or not with the average of a sample, or to test the difference in the mean of a sample with a hypothetical score. *Paired Samples T-Test* or *Independent Samples T-Test* using *IBM Statistical Package for Social Sciences (SPSS) 26.0* software application for windows with a significant level of 0,05. With the decision in the *Independent Samples T-Test* on SPSS that is if the significance score (2-tailed) $< 0,05$ indicates a significant difference between the initial variable and the final variable.

Meanwhile, if the significance score (2-tailed) $> 0,05$ indicates that there is no significant difference between the initial variable and the final variable.

In the table of significance in *Paired Samples T-Test* shows a score of 0,000, which means the score is less than 0,05 ($0,000 < 0,05$). So, based on the results that have been obtained, the researcher concludes that “There is the significant effect of Word Connecting Game to students’ vocabulary mastery at grade VIII SMP Negeri 1 Sooko”. The calculation can be seen in Appendix 24 and 25.

D. Discussion

Based on the results of this research, the researcher has proven Lewis Carroll’s theory of word chain or word connecting game is kinds of game purposing to improve the players ability in mastering vocabulary of words.⁷⁷ Students try to connect words by matching the last letter of a word with the first letter of the next word. For example: *keep, put, take, eat* where each new word has the first letter as the last letter of the previous word. They can use any word they know, but in this research, the researcher focuses on verb 1 and verb 2.

This game is called Word Connecting Game which is inspired from Word Chain Game. The theory states that the Word Connecting Game is the right technique for vocabulary, and in this research, the researcher found that the average score of students’ vocabulary mastery before using the Word Connecting Game was 50,74 and after using the Word Connecting Game was 76,11. This means that there is a significant effect of Word Connecting Game to students’ vocabulary mastery at grade VIII of SMPN 1 Sooko.

The results above support previous research by several researchers. First, from Novalia Tanasy and Nuraliah Ali in their journal the average score in the pre-test was 34,76 and in the post-test 83,56.⁷⁸ Furthermore, Idawati Waruwu, Asri Rafica Silalahi, Susianty Sinaga, and

⁷⁷ Lewis Carroll, *Word Chains - the Game of Subtle Changes* (2007). www.wordchains.com/faq.php, accessed on December 27, 2022.

⁷⁸ Novalia Tanasy and Nuraliah Ali, “Improving the Vocabulary Mastery Through Word Connection Game,” *ETERNAL*, 5, 2 (2019), 326.

Herliaman Lafau in their journal that used the class action research method to get a score of cycle I or pre-test of 70% (71,90) and after applying Word Connecting Game a score of cycle II or post-test of 90% (83,90).⁷⁹ This shows that Word Connecting Game can improve students' vocabulary mastery.

Meanwhile, the researcher got the average pre-test score of the experimental class was 50,74. The average score of the pre-test results is lower than Idawati's results but higher than Novalia's results. From the description above it can be seen that the highest average score was obtained by Idawati Waruwu, et al. where the pre-test average score was 71,90 and the lowest experimental group pre-test average score was obtained by Novalia Tanasy, et al. in this research where the average pre-test score was 34,76.

Then, for the post-test results the researcher got the average post-test score for the experimental class was 76,11. The average score of the post-test results is lower than the results of Novalia Tanasy, et al. and Idawati Waruwu, et al. From the description it can be seen that the highest post-test average score was obtained by Idawati Waruwu, et al. where the average score in the post-test was 83,90 and the lowest average score in the post-test in the experimental group was obtained by the researcher where the mean post-test score was 76,11.

From the presentation of these data, there was an increase from the pre-test score to the post-test score after using the Word Connecting Game. Novalia Tanasy, et al. got an increase of 48,80, Idawati Waruwu, et al. got an increase of 12,00. While researchers get an increase of 25,37.

Based on the results of the research, the researchers obtained the effect of using the Word Connecting Game on students' vocabulary mastery. The same thing can also be seen from several studies that the use of the Word Connecting Game has an effect on students' vocabulary mastery, especially in class VIII students of SMP Negeri 1 Sooko. This means that the theory

⁷⁹ Idawati Waruwu, et al., "Word-Connecting Games on St Ignasius Junior High School Students' Vocabulary Improvement in Medan," *Jurnal Pendidikan Bahasa*, 9, 2 (2022): 341.

has been proven where students are able to master vocabulary. Therefore, the Word Connecting Game has had a significant effect on research that has been conducted by other researchers or researchers mentioned in the related findings and the Word Connecting Game is very effective for helping English teachers in the teaching and learning process, especially in teaching vocabulary.



CHAPTER V

CONCLUSION AND RECOMMENDATIONS

A. Conclusion

Based on the results of the study, the vocabulary mastery of class VIII students of SMP Negeri 1 Sooko before using the Word Connecting Game was still low. This can be seen from the students' pre-test average score of 50.74 in the experimental class and 49.63 in the control class.

However, after using the Word Connecting Game, the vocabulary mastery of class VIII students of SMP Negeri 1 Sooko had a higher score. This can be seen from the average post-test scores of students, 76.11 in the experimental class and 56.11 in the control class.

In the final results it is also known that the significance score (2-tailed) is smaller than the significance level ($0.000 < 0.05$) which means that it indicates a significant difference between the initial variable and the final variable. Therefore, based on the results of this study "There is a significant effect of Word Connecting Game to students' vocabulary mastery at grade VIII of SMP Negeri 1 Sooko Ponorogo".

B. Recommendation

Researchers get a lot of information in teaching and learning English after completing this research. From this research, researchers saw several things that needed to be improved. This makes researchers provide some suggestions, as follows:

1. For English teachers, it is expected to use the Word Connecting Game in teaching vocabulary because in this research and other researches it is proven that the Word Connecting Game is effectively applied in class.
2. For students, it is expected to use the Word Connecting Game in learning English because it can practice vocabulary mastery, can increase vocabulary so they can practice the four skills in English (Reading, Writing, Listening and Speaking).

3. For English lecturers, the researcher hopes that the English lecturers can introduce the Word Connecting Game to prospective teacher students so that they have knowledge of interesting vocabulary teaching method.
4. For future researchers, this research hopefully can help other researchers who will conduct further research on the same topic. Other researchers can obtain information from this experimental research, and even make comparisons between this research and other studies that have similar variables.



BIBLIOGRAPHY

- Alqahtani, Mofareh. The Importance of Vocabulary in Language Learning And How To Be Taught. *International Journal of Teaching and Education*, (online), Volume 3, No. 3 Year 2015. <https://doi.org/10.20472/TE.2015.3.3.002>, accessed on January 5, 2023.
- Anisa, Nurul, "Increasing Students' Vocabulary Mastery Through ABC Five Principle Game at The Seventh Grade of SMPN 01 Rongkong." *PhD Thesis*, IAIN Palopo: 2021.
- Arikunto, Suharsimi. *Dasar-dasar Evaluasi Pendidikan*. Jakarta: Rineka Cipta, 2020.
- Arikunto, Suharsismi. *Prosedur Penelitian*. Jakarta: PT. Rineka Cipta, 2014.
- Azar, Betty Schramper. *Understanding and using English grammar: Third Edition*. New Washington: Longman, 2006.
- Baresh, Eman Fathia. "Developing Libyan Undergraduates' Writing Skills Through Reflective Journaling: A Critical Literature Review". *Journal of English Language Teaching and Learning (JELTL)*, Libya: 2022: 27-35.
- Broughton, Geoffrey, Christopher B., Roger Flavell, Peter Hill & Anita Pincas. *Teaching English as a Foreign Language*. New York: Routledge, 1980.
- Brown, H. Douglas. *Teaching by Principles: An Interactive Approach to Language Pedagogy*. Englewood Cliffs, NJ: Prentice Hall Regents, 2007.
- Cambridge learner's dictionary*. Cambridge: Cambridge University Press, 2001.
- Carten, Jeanne Mc. *Teaching Vocabulary, Lesson from the Corpus, Lesson for the Classroom*. United State America: Cambridge University Press, 2007.
- Carroll, Lewis. *Word Chains - the Game of Subtle Changes*. 2007. www.wordchains.com/faq.php, accessed on December 27, 2022.
- Connect With Words: Grade 3*. Colombus: American Education Pub, 2007.
- Creswell, John W. and J. David Creswell. *Research Design Qualitative, Quantitative, and Mixed Methods Approaches: Fifth Edition*. Los Angeles: Sage, 2018.
- Darajat, Sofyan Kamil. "The Effectiveness of Environmental Mnemonic Technique (EMT) to Improve Students' Vocabulary Mastery in Vocational Highschool." *PhD Thesis*, Universitas Muhammadiyah Purwokerto 2016.
- Ermasari, Elin. "The Effect of Using Board Game Towards Students' Vocabulary Mastery (A Quasi-Experiment to the Seventh Grade Students of SMPN 16 Tangsel in 2017/2018 Academic Year)." *Bachelor's Thesis*, Jakarta: FITK UIN Syarif Hidayatullah Jakarta: 2018.
- Firda, Ismi Narulita. "The effect of using the four square strategy to enhance students' vocabulary retention: a quasi-experimental study at the tenth grade of SMAN 5 Kota Tangerang Selatan in Academic Year 2017/2018." *Bachelor's Thesis*, Jakarta: Fakultas Ilmu Tarbiyah dan Keguruan UIN Syarif Hidayatullah: 2018.

- Firmansyah, Achmad Yanuar. Applying The “Word Chain” Game to Teach Descriptive Speaking To The Eight Graders In Smpn 26 Surabaya. *RETAIN*, (online), Volume 3, no. 2 Year 2015. <https://jurnalmahasiswa.unesa.ac.id/index.php/retain/article/view/12982>. Accessed on January 12, 2023.
- Gay, L. R., Geoffrey E. Mills, and Peter Airasian. *Educational Research Competencies for Analysis and Applicatins, Tenth Edition*. America: Pearson, 2012.
- Hardiyanti, Ika. “The Effectiveness of Using Hyponymy Games in Teaching Vocabulary.” *Thesis*, South Sulawesi: Universitas Muhammadiyah Makassar: 2018.
- Hedge, Tricia. *Teaching and Learning in the Language Classroom*. United Kingdom: Oxford University Press, 2002.
- Holden, William R. *Learning To Learn: 15 Vocabulary Acquistition Activities, Tips and Hints*. Modern English Teacher. 1999.
- Hornby, A S. *Oxford Advanced Learner’s Dictionary of Current English*. Oxford: Oxford University Press, 1995.
- Illia, Ilin. “Reading (In) H. Skovoroda”. Research Gate (online), 2022. https://www.researchgate.net/profile/IlliaIlin/publication/364011450_Reading_in_H_Skovoroda/links/6335f1beff870c55cee81d1f/Reading-in-H-Skovoroda.pdf, accessed on January 2023.
- Jackson, Howard and Etienne Ze Amvela. *Words, Meaning and Vocabulary*. London; New York: Continuum, 2000.
- Latief, Mohammad Adnan. *Research Method on Language Learning an Introduction*. Malang: UM Press.
- Leong, La Mei, and Sayedeh Masoumeh Ahmadi. “An Analysis of Factors Influencing Learners’ English Speaking Skill”. *International Journal of Research in English Education*, University Sains Malaysia: 2017: 34-41.
- Mills, Geoffrey E. and L.R. Gay. *Educational Research Competencies for Analysis and Applications: Eleventh Edition*. Boston: Pearson, 2015.
- Nunan, David. *Language Teaching Methodology: A Textbook for Teachers*. New York: Phoenix Ltd., 1995.
- Nur F, Tira. “Errors In Students’ Writing Composition In Simple Present Tense “My Daily Activity””. *Journal of English Language Education*: 2019: 47-62.
- Rakhmawati, Dian. The Influence of Vocabulary Journal in Teaching Students’ Vocabulary Mastery. *SMART*, (online), Volume 2, No. 1 Year 2016. <http://ejournal.stkipmpringsewu-lpg.ac.id/index.php/smart/article/view/148>, accessed on December 27, 2022.
- Razali, Nornadiah Mohd and Yap Bee Wah. “Power Comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling Tests.” *Journal of Statistical Modeling and Analytics*, Universiti Teknologi MARA: 2011: 21-33.

- Renck J, Mary. *Strategies for Developing Children's Listening Skills*. Indiana: Phi Delta Kappa Educational Foundation, 1991.
- Richards, Jack C. and Willy A Renandya. *Methodology in Language Teaching an Antalogy of Current Practice*. New York: Cambridge University Press, 2001.
- Rini, Ayu. *Excellent English Games*. Jakarta: Kesaint Blanc, 2009.
- Sanjaya, Wina. *Penelitian Pendidikan: Jenis, Metode dan Prosedur*. Jakarta: KENCANA, 2013.
- Santoso. *Teaching English as a Foreign Language*. Manchester: Manchester University, 2010.
- Soon, Goh Ying and Yee Leong Yeng. "Empirical Study on The Use of Puzzle Games for Improving Chinese Character Acquisition of Non-Native Learners of Chinese Language." *Academic Journal UiTMT*, Universiti Teknologi MARA Terengganu: 2015.
- Sopia, Heni. "The Influence of Using Word Square Game Towards Students' Vocabulary Mastery at The Seventh Grade of Mts Al-Hikmah Bandar Lampung in The Academic Year of 2018/2019." *PhD Thesis*, Lampung: UIN Raden Intan 2018.
- Sugiyono. *Memahami Penelitian Kualitatif*. Bandung: CV Alfabeta, 2005.
- Sugiyono. *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta, 2017.
- Suyanto, Kasihani K.E. *English for Young Learners*. Jakarta: PT. Bumi Aksara, 2007.
- Stockermer, Daniel. *Quantitative Methods for the Social Science: A Practical Introduction with Examples in SPSS and Stata*. Ontario: Springer International Publishing, 2019.
- Taber, Keith S. *The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education*. University of Cambridge: Cross Mark, 2018.
- Tanasy, Novalia, and Nuraliah Ali. "Improving the Vocabulary Mastery Through Word-Connection Game". *ETERNAL*, Universitas Muslim Maros: 2019: 318-335.
- Ur, Penny. *A Course in Language Teaching Practice and Theory*. New York: Cambridge University Press, 1991.
- Warriner, John E. *English Workshop*. Orlando, Fla: Harcourt Brace Jovanovich, 1986.
- White, Mary Gormandy, *How to Assess Vocabulary: Ideas for Measuring Progress*. Tennessee: Your Dictionary, 2021. <https://education.yourdictionary.com/for-teachers/how-to-assess-vocabulary.html>, accessed on January 23, 2023.
- Wise, Debra. *Great Big Book of Children's Games: over 450 indoor and outdoor games for kids*. New York: Reader's Digest Association, 1999.