

**The Influence of Using Brain-Based Learning ( BBL ) Strategy on  
Students' Vocabulary Mastery in the Second Semester at Seventh  
Grade of SMPN 1 Sumber Jaya in the Academic Year of 2022/2023**

**A Thesis**

**Submitted as a Partial Fulfillment of the Requirements For S1-  
Degree**

**By:**

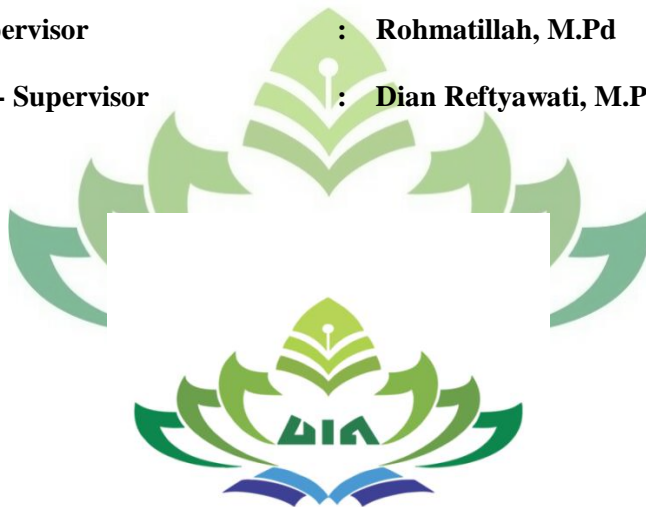
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## ABSTRACT

### **The Influence of Using Brain-Based Learning ( BBL ) Strategy on Students' Vocabulary Mastery in the Second Semester at Seventh Grade of SMPN 1 Sumber Jaya in the Academic Year of 2022/2023**

Vocabulary is essential in language and for all people to interact with each other. This research was conducted based on the results of observations by researchers in seventh-grade students at SMPN 1 Sumberjaya West Lampung regarding the problems students face in learning English, especially in mastering vocabulary in descriptive text. In this case, the researcher used the Brain-Based Learning Strategy to help students understand the vocabulary contained in descriptive reading texts. The Brain-based learning strategy is the engagement of strategies based on principles derived from understanding the brain. Brain-based learning strategies are also used to describe applying a theory about the brain to help children maximize their learning potential. Brain-based learning created a relaxed, fun, active, and meaningful learning environment. This research aimed to determine if there is any significant influence of using the Brain-Based Learning ( BBL ) strategy on students' vocabulary mastery in the second semester of seventh grade of SMPN 1 Sumber Jaya in the academic year of 2022/2023. This research is experimental.

In this research, a quasi-experimental pre-and post-test design was used. The population of this research is the seventh-grade students of SMPN 1 Sumberjaya West Lampung. The total population was 243 students, while researchers used a cluster random sampling technique for sample selection. The research sample consisted of 68 students, and this sample consisted of two classes: 34 students for the experimental class and 34 students for the control class. The researcher used instruments ( Multiple Choice Questions) in the form of research with pre-tests and post-tests to collect data. The treatments were delivered in 3 x 80 minutes. After administering the pre-test and post-test, the researcher used SPSS to compute the independent sample t-test to determine whether the data were regular and homogeneous.

This research concluded that the data are normal because of the Sig. Pre- and post-test experimental class and control class results  $> 0.05$ . Furthermore, the data are homogeneous, as seen from the Sig. (based on mean)  $0.576 > 0.05$ . This research has normal and homogeneous data results, so the hypothesis test used a parametric, independent sample t-test. Based on the analysis of data calculations in hypothesis testing, a significant effect could be seen in the dependent sample t-test table where the value of Sig. (2tailed) of the same variant, which is  $0.01 < 0.05$ , means that  $H_0$  is rejected, and  $H_a$  is accepted that the Brain-Based Learning Strategy could positively and better influence students' Vocabulary mastery.

*Key words: Brain-Based Learning Strategy, Experimental Design, Vocabulary Maste*



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Title: **THE INFLUENCE OF USING BRAIN BASED LEARNING (BBL) STRATEGY ON STUDENTS VOCABULARY MASTERY IN THE SECOND SEMESTER AT SEVENTH GRADE OF SMPN 1 SUMBER JAYA IN THE ACADEMIC YEAR OF 2022/2023**

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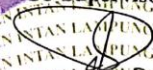
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ADMISSION

The following thesis entitled "THE INFLUENCE OF USING BRAIN BASED LEARNING (BBL) STRATEGY ON STUDENTS' VOCABULARY MASTERY IN THE SECOND SEMESTER AT SEVENTH GRADE OF SMPN 1 SUMBER JAYA IN THE ACADEMIC YEAR OF 2022/2023", written by FITRI ESA ULVA MIMA, NPM: 1911040343, Department: English Education, has been successfully defended as Thesis Defense of the Faculty Tarbiyah and Teacher Training, Raden Intan State Islamic University, Lampung. The thesis defense was held on, November 22, 2023.

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## Free Plagiarism Letter

I hereby declare that this thesis, entitled “**THE INFLUENCE OF USING BRAIN - BASED LEARNING (BBL) STRATEGY ON STUDENTS’ VOCABULARY MASTERY IN THE SECOND SEMESTER AT SEVENTH GRADE OF SMPN 1 SUMBER JAYA IN THE ACADEMIC YEAR OF 2022/2023**”, is entirely my own word and is based on my own research. I also declare that all material and source consulted in the preparation of this thesis, be the books, articles, and any other kinds of document, and are properly acknowledged in the footnotes and bibliography.



**Fitri Esa Ulva Mima**  
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## DECLARATION

Hereby I declare officially confirm that the thesis, “ The Influence of Using Brain-Based Learning ( BBL ) Strategy on Students’ Vocabulary Mastery in the Second Semester at Seventh Grade of SMPN 1 Sumber Jaya in the Academic Year of 2022/2023 ” is completely my own individual research. I am quite aware of the fact that I have considered statements and theories from various sources and fully acknowledged in this thesis.

Bandar Lampung, November 02 ,2023

Declared by,



## MOTTO

وَالْوَايِكُمْ اَلْسِنَتِكُمْ وَاخْتِلَافُ وَاَلْاَرْضِ السَّمَوَاتِ خَلْقُ اٰيَتِهٖ وَمِنْ

لِّلْعٰلَمِيْنَ لَايْتِ ذٰلِكَ فِيْ اِنَّ

*“And among his signs is the creation of the heaven and the earth, and the different of your languages and colour. Verily, in that are indeed signs for men of sound knowledge. “ (Ar-Ruum 30:22)<sup>1</sup>*



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<sup>1</sup> Muhammad Taqi-ud-Din al-Hilali & Muhammad Muhsin Khan, *The Noble Qur'an in The English Language*. ( Madina : King Fahd Complex for The Printing of The Holy Qur'an Madina, K.S.A, 2015 ), 542.

## DEDICATION

I dedicate this thesis to everyone who love and care about me from the bottom of my heart. I would like to dedicate this thesis specifically to:

1. My God Allah SWT, whose blessing and mercy have been very crucial to the completion of my thesis.
2. My beloved parents: Mr. Abdul Kodir Jailani and Mrs. Muhayanti, who always pray for me, give encouragement to complete this education, and support in every process of this educational journey to get the degree of S.Pd.
3. My beloved sister: Dinia Fahriza Ulva.
4. My beloved friends who stay in Jadiddah boarding house, and (E)njoy class.
5. My beloved almamater; UIN Raden Intan Lampung





## CURRICULUM VITAE

The researcher is Fitri Esa Ulva Mima. Her nickname is Esa. She was born in Lampung Barat, Lampung exactly on December 20<sup>th</sup>, 2000. She is the first of two children of Mr. Abdul Kodir Jailani and Mrs. Muhayanti daughter. She has one sister. Her sister's name is Dinia Fahriza ulva.

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In this occasion, the researcher would like to express the great thanks to:

1. Prof. Dr. Hj. Nirva Diana, M.Pd., the Dean of Tarbiyah and Teacher Training Faculty of Raden Intan State Islamic University Lampung.
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9. Her beloved friends who stay in Jadiddah boarding house, and (E)njoy class.

May Allah, the Most Gracious and the Most Merciful, always give His blessing and compassion for all Muslim in the world. The researcher is fully aware that there are still a lot of weakness in this thesis. For this the researcher truthfully expects criticizes and suggestion from the reader to enhance the quality of the thesis.



Bandar Lampung, November 02, 2023  
Declared by,  
  
**Fitri Esa Ulva Mima**  
**NPM. 1911040343**

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### **CHAPTER III.**

#### **RESEARCH METHOD**

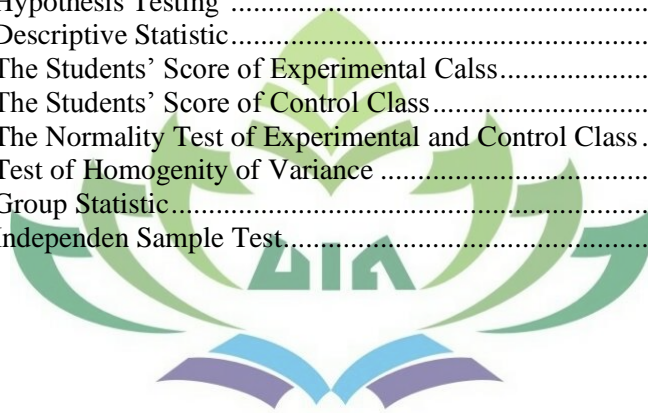
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## CHAPTER I INTRODUCTION

### A. Title Confirmation

First, to understand the title of this proposal and avoid misunderstanding, the researcher feels the need to explain some words which become the title of this Research the Influence of Using Brain-Based Learning ( BBL ) Strategy on Students' Vocabulary Mastery.

Influence is often described as the capacity (of persons or things) to be a compelling force on or to have an effect, changing how someone or something develops, behaves or thinks.<sup>1</sup> Based on this definition, influence is a solution construction that one does by giving advice or guidance to others, establishing purposes and goals, and improving quality continuously to students. So, the students can upgrade their knowledge of their vocabulary mastery by incorporating something into their class or lesson.

A list or collection of words or phrases, usually alphabetically arranged and explains or defines what is meant by vocabulary. Vocabulary is a summary or stock of terms employed by a language, group, individual, or work or about a subject. Based on this definition, vocabulary is understanding words and their meanings.

The ability to know words and their meanings is referred to as vocabulary mastery. The students not only hope to understand the words but also their purposes. The teacher has to select what words are suitable to be taught to the students so the students will learn more efficiently. Based on the definition, vocabulary mastery is a competence for the student to know about words and meanings.

In education, a strategy is a plan, method, or series of activities designed to achieve a specific educational goal. Thus,

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<sup>1</sup> Manuel. P and Icom. P, *Influence And Persuasion: Meaning And Limits*, ( Mu: SA – Museum Sector Alliance, 2018 ), 6.

learning strategies can be considered planning, including the circuit of tasks to accomplish particular educational purposes.

Brain-based learning strategy is the engagement of strategies based on principles derived from an understanding of the brain.<sup>2</sup> The strategy of brain-based learning (BBL) in education provides a concept for developing knowledge that is oriented toward empowering student's potential brains. In other words, BBL focuses on how the brain learns and functions and how students are prepared to learn.

A school is an institution or organization authorized to carry out the learning activity as a school organization has specific requirements. Public Junior High School ( SMPN ) 1 Sumber Jaya is an educational institution for learning to read, write and behave well. The choice of SMPN 1 Sumber Jaya, West Lampung, as a place of research, because the school is a school that does not only rely on the teaching and learning process in the classroom but also teaches a strong relationship between teachers and students through interaction outside of class too. Furthermore, SMPN 1 Sumber Jaya is a suitable place to conduct research that researchers was conducted.

Based on the explanation above, it can be concluded that vocabulary is the essential language component utilized in speaking, listening, reading, and writing. As a result, if students want to become language masters, they must also master vocabulary. There are so many strategies that teachers can used in teaching vocabulary to enhance student vocabulary mastery, such as brain-based learning, which is one of the strategies that students can used in education. This study was analyzed the influence of using a brain-based learning (BBL) strategy on students' vocabulary mastery.

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<sup>2</sup> Eric Jensen, *Brain-based learning: the new paradigm of teaching*. 2nd ed. Thousand Oaks. ( CA: Corwin Press, 2008 ), 4.

## B. Background of the Problem

English is required in all schools to compete in the globalization era and absorb information in the twenty-first century. English language learners must achieve communicative competence; vocabulary is part of linguistic competence. When students are studying a language, the most essential thing to learn first is vocabulary. Like Scott, he said that “finding the right word to fit the intended meaning is frustrating when their store of words is limited”.<sup>3</sup> Vocabulary is essential in learning English because it can influence four skills. Beyond grammar, vocabulary mastery is necessary for anyone who understands the language in listening, speaking, writing, and reading. Suppose a foreign language learner has a sufficient vocabulary and can use it correctly. In that case, they can speak efficiently and accurately, write, or understand what they read or hear.

Vocabulary is essential to language learning, and the student must learn it. Because vocabulary cannot be separated from the four skills of English (Listening, reading, speaking, writing). According to Hornby, vocabulary is as follows: (1) the total number of the words which make up a language, (2) all the words known to a person in a particular book, and (3) a list of the words with their meaning, especially in a book for learning a foreign language.<sup>4</sup> Vocabulary is a language component that plays a significant role in language use and learning.

Aside from that, Richards and Renandya said that vocabulary is a core component of language proficiency. Without an extensive vocabulary and strategies for acquiring new vocabulary, learners often achieve language learning opportunities around them, such as listening to the radio, listening to the native speaker, using the language in different

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Scott Thornbury, *How Teach Vocabulary*. ( England: Longman, 2002 ), 14.

<sup>4</sup> AS. Hornby, *The Advance Learners Dictionary of Current English*. ( London: Oxford University Press, 1995 ), 985.

contexts, reading, or watching television.<sup>5</sup> Vocabulary is significant in supporting the student's ability to learn English as a second and foreign language.

According to Hiebert and Kamil, the other definition of vocabulary is the knowledge of a word's meanings.<sup>6</sup> Vocabulary is all the words that have meaning, for example, a list of words found in a book, novel, or dictionary. All we know the importance of and use to communicate with other people, such as in a conversation, writing a letter, or reading something in another language, is called vocabulary.

Based on the definition above, vocabulary is the basis and also the primary thing of language. No message can be conveyed successfully without choosing appropriate words to express the feeling. Students of the English language must be able to master vocabulary. It is one component that connects the four skills of reading, speaking, listening and writing. The students who are good at the mastery of vocabulary their knowledge of language is also good. On the other hand, students with a limited vocabulary need help understanding the meaning of a word, phrase or sentence.

Vocabulary is significant in supporting the student's ability to learn English as a foreign language. However, sometimes teachers need help teaching English subjects, especially in effectively teaching vocabulary to their students. The difficulty stems from students' understanding of what they must learn and how they should be taught. Because some of the students did not know what they should learn to master vocabulary. To effectively teach vocabulary, an English teacher must be selective in selecting and implementing appropriate techniques or strategies.

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<sup>5</sup> Willy A. Renandya., & Richards, J.C. *Methodology In Language Teaching*. ( New York: Cambridge University Press, 2002 ), 255.

<sup>6</sup> Elfrieda H. Hiebert. and Michael L. Kamil. *Teaching And Learning Vocabulary: Bringing Research to Practice*. ( London: Lawrence Erlbaum Associates, 2005 ), 3.

Additionally, on November 22 2022, the researcher performed a preliminary study by interviewing the seventh-grade English teacher at SMPN 1 Sumber Jaya Lampung Barat. The researcher asked the teacher some questions on vocabulary activities in teaching-learning and found that most the students have less interested and struggled to study English especially in vocabulary, even though some of the students are quite good at learning vocabulary. Based on the researcher's interview with an English teacher. The teacher claimed that the student's language skills were lacking. One of the causes is that many students learn a little from elementary school. This case becomes problematic because junior high school students need more vocabulary. Additionally, the issue arises from the students' need for more interest in the teaching and learning process, which makes them feel tedious when acquiring English vocabulary. Due to their low self-esteem, shyness, and lack of practice, so the students got struggle in understanding the vocabulary.

The teacher also said that because junior high school students are beginning English language learners, the teacher added that managing the class and the students is essential. As a result, they need help with every part of English, but particularly with vocabulary. They must be instructed using engaging materials or strategies. The seventh-grade students' test results supported it. The student's vocabulary scores still need to upgrade, falling below the minimal requirements for vocabulary mastery.

**Table 1.1**  
**The percentage of vocabulary score in the seventh grade of**  
**SMPN 1 Sumber Jaya Lampung Barat in the second**  
**semester in the academic year of 2022/2023**

*Source: Teacher's document of students' vocabulary mastery score at the seventh grade of SMPN 1 Sumberjaya in the*

NO	CLASS	THE MEAN SCORE	TOTAL STUDENTS		THE TOTAL STUDENTS
			> X	≤ X	
1.	VII A	59	15	19	34
2.	VII B	56	13	21	34
3.	VII C	55	14	20	34
4.	VII D	54	15	19	34
5.	VII E	52	15	19	34
6.	VII F	55	15	19	34
7.	VII G	56	18	21	39
MEAN		55			
TOTAL			105	138	243
PERCENTAGE			43.20 %	56.79 %	100 %

*academic year of 2022/2023.*

Based on the table above, the question students who got scores below the average are very high compared to above average. The total number of students who got scores below the average ( $\leq X$ ), as many as 138 ( 56.79 % ) students, and those who get scores above the average ( $> X$ ), as many as 105 ( 43.20 % ) out of a total of 243 ( 100 % ) participants educate. It can be said that the students have less interest in the teaching and learning process, which makes them feel tedious when acquiring English vocabulary.

The researcher then interviews some students and asked vocabulary mastery questions to validate the data findings. Most students said they lacked vocabulary. After all, they are not interested in learning English especially in vocabulay because the students have trouble translating the word. Due to their limited

vocabulary and fear of making a mistake when responding to a teacher's question, students cannot participate in class activities. The students cannot respond to the questions from the teacher or tests given by their teachers because they are difficult in memorizing vocabulary and do not understand the questions' meanings. Instead, they constantly consult dictionaries to learn new words.

These language issues must be resolved since they may make it difficult for students to advance to the next level or grade. Additionally, students may need more motivation to learn English because they believe learning vocabulary is challenging. And then the students will be bored in English class. The researcher can use an exciting way to upgrade students' vocabulary mastery based on the problem mentioned above with the students. In this study, strategies will be used as a process of teaching vocabulary.

The quality and quantity of language skills students can be influenced by the teaching method or strategy that will be given by the teacher in school when teaching in class. Students require interesting strategies for learning vocabulary to be acceptable, enjoyable, and active participants in the teaching-learning process. Because of this condition, they will be fine. They will not be bored with the teaching materials or the class situation, making learning the material and vocabulary easier.

The teacher should employ an effective strategy to make students easy in learning vocabulary and influence their vocabulary mastery. In other words, a teacher must carefully apply strategy to teach vocabulary. The teacher can use some media to teach vocabulary, such as games, pictures, songs, videos, and reading novel text. However, in this research, the researcher tries to use the Brain-Based Learning ( BBL ) strategy in teaching vocabulary.

According to Froschl and Sprung, Brain-Based Learning is a comprehensive instruction approach using current



neuroscience research.<sup>7</sup> Brain-based learning theory focuses on research on how the brain works and how teachers can use this knowledge to help second language students learn English quickly and efficiently. Like Jensen, Brain-based learning strategies is a way of thinking about the learning process. It is a set of principles and a foundation of knowledge and skills through which we can make better decisions about the learning process.<sup>8</sup> As a learning approach, Brain-Based Learning is based on the structure and function of the human brain. This strategy involved interaction with the material and students. They can communicate the problem in a group and share their idea and thinking. In class, learning must be interspersed with things that can make students re-focus and maintain concentration.

The other definition of Brain-Based Learning, according to Tüfekçi and Damirel Brain-Based Learning, is a student-centred approach presented to ensure that the individual's learning is more effective and lasting.<sup>9</sup> From here, we know that Brain-Based Learning is a strategy that a teacher can use in the teaching-learning process; through this strategy, the teacher can use several techniques during the teaching-learning process, such as playing music as a medium in learning activities, making a group discussion and using an exciting game that can make the process of learning more fun for the student. Brain-based learning can be used in teaching vocabulary because this strategy is exciting and enjoyable for the student. Students can carry out the learning activity to enhance their knowledge, especially in mastering vocabulary.

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<sup>7</sup> Froschl, M., & Sprung, B. *Raising And Educating Healthy Boys: A Report On The Growing Crisis In Boys' Education*, (New et al.: EEC, 2005 ), 14.

<sup>8</sup> Eric. Jensen. *Brain-based learning: The New Science Of Teaching And Training*. Rev. ed. Thousand Oaks. ( California: Corwin Press, 2000 ), 10.

<sup>9</sup> Tüfekçi and Damirel. "The Effect Of Brain-Based Learning On Achievement, Retention, Attitude and Learning Process", (ELSEVIER. Procedia Social And Behavior Sciences, ( 2009 ): 1782-1791, <https://doi.org/10.1016/j.sbspro.2009.01.316>).

The teacher can suggest that the students use all body parts to move optimally during teaching-learning. Their eyes used to read and observe, their hand used to write, their feet used to play games in class, and their mouth used to ask and make a discussion, so this can make the learning process more active. Giving material to the students is one of the class buildings that emphasizes student interaction. They can communicate some problems with the material given by the teacher in a group and share their ideas and thinking with their friends in class. This strategy was designed to develop students' vocabulary mastery in learning English.

Three types of research have been conducted related to Brain-based Learning strategy. Izzgheche conducted the first research, "The Role of Brain-based Learning Strategy in developing middle school Pupils' vocabulary retention".<sup>10</sup> Retaining what has been learned as vocabulary for a long time is challenging for many pupils. Students are always prone to forget their learned vocabulary throughout the learning process due to many causes. Accordingly, the present research investigated the efficiency of brain-based learning in enhancing pupils' vocabulary retention. Moreover, it sought to explore teachers' attention toward the brain-based learning strategy. This study hypothesized that a brain-based learning strategy can help pupils develop their vocabulary retention. The descriptive qualitative research method was adopted to achieve the intended aims and test the hypotheses. To gather data, a semi-structured questionnaire and a semi-structured interview were used as data collection methods. The population of this study was middle school pupils and teachers. The findings revealed that brain-based learning strategy is a teaching and learning strategy that helps, to a great extent, pupils to promote their learning and, thus, their retention. In addition, teachers have a positive attitude

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<sup>10</sup> IZZGHECHE, K. *The role of brain-based learning strategy in developing middle school pupils' vocabulary retention*. 2020

toward the strategy and are willing to initiate it. Thus, it can be concluded that the research hypotheses were confirmed.

In addition, another research was conducted by Kandasamy, Ibrahim, Jaafar and Hanif Zaid titled “Enhancing Vocabulary Acquisition And Retention Through The Brain-Based Learning Strategies”.<sup>11</sup> This research aimed to assess the effectiveness of the Brain-Based Learning Approach in enhancing vocabulary acquisition and retention among year four pupils in a primary school. This study used a descriptive qualitative design for the control and experimental groups. This study found that the independent T-test showed a significant difference in vocabulary acquisition and retention among pupils in both groups. The pupils who followed the Brain-Based Teaching approach attained better vocabulary acquisition and retention than those exposed to the traditional teaching method.

Tüfekçi and Damirel conducted another similar research about “The Effect of Brain Based Learning on Achievement, Attitude, and Learning Process”.<sup>12</sup> This research aims to determine the effect of learning organization instruction designed according to Brain-Based Learning on achievement retention, attitude and the learning process. This study used experimental design and qualitative data. This study found that a Brain-Based Learning environment positively affects higher-level learning, retention of learning and the attitude toward a course of university students.

Considering the problem above, the researcher believes that Brain-Based Learning Strategies can enhance students’ vocabulary mastery and will be effective in the vocabulary course. Implementing the Brain-Based Learning Strategy itself motivated the researcher to conduct the research about

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<sup>11</sup>K. Kandasamy et al., “Enhancing Vocabulary Acquisition and Retention Through the Brain-Based Learning Strategies”, *AJELP: Asian Journal of English Language and Pedagogy*, 9(2), ( 2021), 26–42. <https://doi.org/10.37134/ajelp.vol9.2.3.2021>.

<sup>12</sup> Tüfekçi and Damirel, “The Effect Of Brain Based Learning On Achievement, Retention, Attitude and Learning process”, 1782-1791.

vocabulary mastery at SMPN 1 Sumber Jaya Lampung Barat. Based on the explanation above, the researcher is going to conduct the research entitled: “The Influence of Using Brain-Based Learning ( BBL ) Strategy on Students’ Vocabulary Mastery in the Second Semester at Seventh Grade of SMPN 1 Sumber Jaya in the Academic Year of 2022/2023”.

## **C. Identification and Limitation of the Problem**

### **1. Identification of the Problem**

Based on the problem’s background, the researcher concludes the following issues :

- a. The students less interested in learning English especially in vocabulary.
- b. The students still have difficulty in translate the words.
- c. The students are difficulty in memorizing the meaning of the words.

### **2. Limitation of the Problem**

To avoid misunderstanding and misinterpretation towards the problem in this research, this research limits this study to focused on the influence of using the Brain-Based Learning ( BBL ) strategy on students’ vocabulary mastery. The researcher focused on using the Brain Based Learning ( BBL ) Strategy in this research. For teaching vocabulary, especially in the verbs, nouns, and adjectives, with the material descriptive text short and simple. The researcher limited the kinds of vocabulary which is appropriate to the syllabus of the seventh grade of SMPN 1 Sumber Jaya.

## **D. Formulation of the Problem**

Based on the background and the limitation that was presented above, the research question of this problem was formulated as follows :

“is there any significant influence of using Brain-Based Learning ( BBL ) strategy on students’ vocabulary mastery in the second semester at seventh grade of SMPN 1 Sumber Jaya in the academic year of 2022/2023 ?”.

### **E. The objective of the research**

Followed by the problem statement, the research objective is “There is any significant influence of using Brain-Based Learning ( BBL ) strategy on students’ vocabulary mastery in the second semester at seventh grade of SMPN 1 Sumber Jaya in the academic year of 2022/2023”.

### **F. Significance of the Research**

The significance of this research can be viewed from both theoretical and practical benefits, as described below:

#### 1. Theoretical significances

This research can be used as a reference for someone who wants to research vocabulary mastery, especially using Brain-Based Learning (BBL). It can also inform readers about the influence of using brain-based learning ( BBL ) strategy on students’ vocabulary mastery in teaching English for junior high school.

#### 2. Practical Significance

The researcher hopes that the result of this research will be helpful for teachers and students. They can use this strategy in teaching-learning to motivate students to study English.

##### a. For English teacher

The result of this study is expected to help the teacher find an alternative strategy for teaching vocabulary to produce knowledge for their class to influence their teaching and learning process.

##### b. For the students

This study can influence the students’ mastery of vocabulary and may guide them to memorize and overcome their difficulties in understanding vocabulary. It will make students enjoy and feel relaxed in learning English without feeling stressed that they have to memorize the meaning of vocabulary.

c. For the Next Researchers

The findings of this research are expected to be useful as their reference source and also to inform readers about the influence of the brain-based learning strategy towards students' mastery of vocabulary.

## G. Relevant Researches

Three relevant research studies use Brain-Based Learning as a strategy in their research. Two of three Research studies are related to improving vocabulary, and one is related to achieving retention, attitude, and learning process.

A relevant study similar to this is the research conducted by As'ari titled "Improving Students' Vocabulary Mastery Through Brain-Based Learning ( BBL ) Strategy".<sup>13</sup> This research aims to determine whether the Brain-Based Learning ( BBL ) Strategy can improve Students' Vocabulary Mastery. This study used classroom action research to take the data. Based on the result of this research, the researcher assumed that teaching English lessons, especially teaching vocabulary using the Brain-Based Learning Strategy, can improve students' vocabulary mastery without causing stress and boredom.

The second Research by Kandasamy, Ibrahim, Jaafar and Hanif Zaid is titled "Enhancing Vocabulary Acquisition And Retention Through The Brain-Based Learning Strategies".<sup>14</sup> This research aimed to assess the effectiveness of the Brain-Based Learning Approach in enhancing vocabulary acquisition and retention among year four pupils in a primary school. This study used a descriptive qualitative design for the control and experimental groups. This study found that the independent T-test showed a significant difference in vocabulary acquisition and retention among pupils in both groups. The pupils who followed the Brain-Based Teaching approach attained better vocabulary

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<sup>13</sup> As'ari, "Improving Students' Vocabulary Mastery Through Brain Based learning ( BBL ) Strategy", ( Skripsi, Pancasakti University Tegal, 2019 )

<sup>14</sup> Kandasamy, "Enhancing Vocabulary Acquisition and Retention Through the Brain-Based Learning Strategies", 26-42.

acquisition and retention than those exposed to the traditional teaching method.

Another similar research by Tüfekçi and Damirel and this Research is about “The Effect of Brain Based Learning on Achievement, Attitude, and Learning process”.<sup>15</sup> This research aims to determine the effect of learning organization instruction designed according to Brain-Based Learning on achievement retention, attitude and the learning process. This study used experimental design and qualitative data. This study found that a Brain-Based Learning environment positively affects higher-level learning, retention of learning and the attitude toward the course of university students.

There are some similarities and differences in the research between the researcher and the other researchers. The similarities between the researcher and the other researchers are that the researchers used the Brain-Based Learning strategy.

The first relevant research concerned whether the Brain-Based Learning ( BBL ) Strategy can improve Students’ Vocabulary Mastery. The object of this research is a study of second-grade students in Junior High School. This research uses classroom action research consisting of 2 cycles. The second relevant research is concerned with assessing the effectiveness of the Brain-Based Learning Approach in enhancing vocabulary acquisition and retention. This research used descriptive qualitative design as a research design. The object is the 33 pupils from primary school. The third relevant research is concerned with determining the effect of brain-based learning on achievement, attitude, and learning process. The object of this research is the student at the university. This study used experimental design and qualitative data as a research design. This research is concerned with determining whether there is a significant influence on the student’s vocabulary mastery using

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<sup>15</sup> Tüfekçi and Damirel. “The Effect of Brain Based Learning on Achievement, Retention, Attitude and Learning process”, 1782-1791.

the Brain-Based Learning ( BBL ) Strategy. The object is students in the seventh grade in junior high school.

Based on the findings above, Brain-Based Learning is always effective when used as part of the learning process. The similarity of this research is that all of the research uses Brain-Based Learning in doing the research. As a result, the researcher is interested in using Brain-Based Learning to teach vocabulary in the current study whether Brain-Based Learning can influence student's vocabulary mastery or not.

The difference between the researcher and the other researchers is that the researcher used quasi-experimental research on the subject of the research. As'ari focused on improving students' vocabulary mastery. Kandasamy, Ibrahim, Jaafar and Hanif Zaid focused on the effectiveness of the Brain-Based Learning Approach in enhancing vocabulary acquisition and retention. Tüfekçi and Damirel focused on the effect of learning organization instruction, designed according to Brain-Based Learning, on achievement retention, attitude and the learning process. The researcher focused on the influence of the Brain-Based Learning Strategy on students' vocabulary mastery, and the subject is the seventh-grade students of SMPN 1 Sumber Jaya.

## **H. Systematics of the Research**

The systematics of this research is divided into five chapters. Each chapter consists of many sub-chapters with detail as follow:

Chapter I consists of title confirmation, background of the problem, identification and limitation of the problem, formulation of the problem, objective of research, significances of the research, relevant research and rationale of the thesis. This research is expected to be helpful in at least three domains for the science of education, students, and the following researchers.

Chapter II consists of the Frame of theory, which consists of sub-chapters such as the concept of vocabulary, the concept of vocabulary mastery, the concept of teaching



vocabulary, the concept of brain-based learning strategies and the concept of word wall strategies. Then, Frame of hypothesis.

Chapter III consists of the research method, which consists of the time and place of the research, research design, population, sample and data collection technique, operational definition of variables, research instrument, validity and reliability of the instrument, fulfilment of the assumption and hypothesis testing.

Chapter IV consists of the research results, talking about data analysis. Chapter four consists of a data description and a discussion.

Chapter V consists of a conclusion about the research result and suggestions the researcher suggested to the students and teachers.



## CHAPTER V CONCLUSION AND RECOMMENDATION

This chapter presents the conclusion and the suggestion. In this chapter, the researcher would like to give some conclusions and offer suggestions that may relate to the subject.

### A. Conclusion

Before testing the hypothesis, the researcher determined whether the data were normal and homogeneous. This research concluded that the data are normal because of the Sig. Pre- and post-test experimental class and control class results  $> 0.05$ . Furthermore, the data are homogeneous, as seen from the Sig. (based on mean)  $0.576 > 0.05$ . This research has normal and homogeneous data results, so the hypothesis test used a parametric, independent sample t-test. Based on the analysis of data calculations in hypothesis testing, a significant effect could be seen in the dependent sample t-test table where the value of Sig. (2-tailed) of the same variant, which is  $0.01 < 0.05$ , means that  $H_0$  is rejected, and  $H_a$  accepts that brain-based learning strategy could positively and better affect students' vocabulary mastery. It can be seen clearly from the acquisition of students' scores before treatment and after treatment compared to the values of the control class, which were taught using the ordinary strategy used by the teacher. By applying the brain-based learning strategy, students' vocabulary mastery can be influenced. Hence, based on research conducted at SMPN 1 Sumber Jaya in the second semester of the academic year of 2022/2023 and analysis of students' pre-test and post-test data in both classes, the researcher concluded that there is a significant influence of using the brain-based learning strategy towards students' vocabulary mastery.

### B. Recommendation

Recommendations are written in this section, depending on the research, findings, and conclusions. These recommendations are given to those involved in teaching and learning English. They are students, English teachers, and following researchers related to the linear implementation of this research, which is the

influence of using the brain-based learning strategy on students' vocabulary mastery.

#### 1. For the Students

From the results of this research, there are several recommendations for students regarding the use of brain-based learning strategies for students' vocabulary mastery as follows:

- a. The students should always improve their English knowledge to get good vocabulary. Because vocabulary is sub-skill that covers all skill in English.
- b. Students should always be active in the process of teaching and learning and not afraid or less motivated in the English lesson, so the students should develop their motivation. Besides, the students should give more attention and keep their attitude when the teacher explains and teaches the lesson. The students also should study hard to reduce their difficulties in learning English.
- c. The proper strategy can help students to learn English understanding the material. Brain Based Learning (BBL) Strategy guides the students to get more vocabulary. The strategy, structures, and procedures of Brain-based learning (BBL) Strategy develop students' interaction in order to develop vocabulary mastery

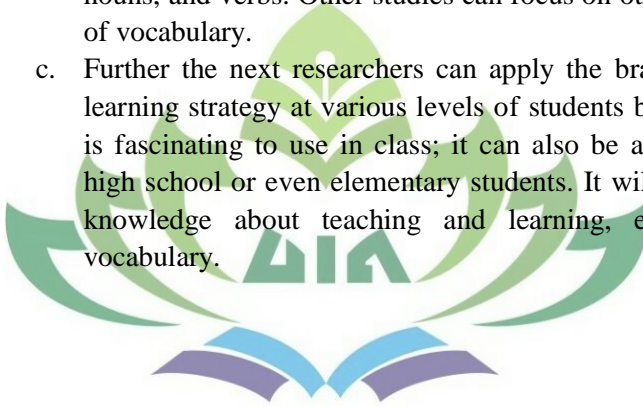
#### 2. For the English Teachers

- a. It is essential to provide more appropriate strategy like brain-based learning strategy as a new reference that help and make it easier for students to master their vocabulary.
- b. The English teachers can create a fun, enjoyable and interesting strategy as one of the alternatives in teaching English in order to develop students' vocabulary mastery as by using Brain-based learning (BBL) Strategy. .
- c. The Brain-based learning (BBL) Strategy makes the class more interesting, enjoyable and active. The

English teacher easily gets the students attention to learn English especially to develop the student's vocabulary mastery in a fun way by using Brain-based learning (BBL) Strategy.

3. For the Next Researchers

- a. In the future, the researches are suggested to explore the aspects of this strategy which are not presented yet in this research. Furthermore, they can use this research as their reference. This research is expected to give them more information about Brain-Based Learning (BBL) Strategy can improve students' vocabulary mastery.
- b. In this research, vocabulary was focused on adjectives, nouns, and verbs. Other studies can focus on other kinds of vocabulary.
- c. Further the next researchers can apply the brain-based learning strategy at various levels of students because it is fascinating to use in class; it can also be applied to high school or even elementary students. It will expand knowledge about teaching and learning, especially vocabulary.



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