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# THE EFFECT OF WORD SQUARE MODEL ON STUDENTS' VOCABULARY MASTERY (A Study at The Eleventh Grade Students of SMA Negeri 1 Saipar Dolok Hole)

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**Abstrac:** *The purpose of this research is to find: 1)the application of Word Square Model. 2) the extent of the students' Vocabulary Mastery before and after using Word Square Model. 3) whether there is any significant effect of Word Square Model on students' Vocabulary Mastery at the Eleventh grade of SMA Negeri 1 Saipar Dolok Hole. Method of the ruler was the experimental. The population of this research was all of the Eleventh grade students of SMA Negeri 1 Saipar Dolok Hole. It consist 144 students. Systematic sampling technique was uses to get a sample it consist 35 students. The technique for collecting data by observation sheet and giving test. The result mean score of the application of Picture Word Inductive Model was 3.30, it was "Very Good". The result show value before using Word Square Model was 47,24, it was categorized "Fail". While the mean score of the students' Vocabulary Mastery after using Word Square Model was 73.72, it was was categorized "Good". The result of ttest was 4.80 and ttable was 2.04 it means that there is a significant effect of using Word Square Model on students' Vocabulary Mastery at the Eleventh grade students of SMA Negeri 1 Saipar Dolok Hole.*

**Keyword:** Word Square Model, Vocabulary Mastery

**Abstrak :** Tujuan penelitian ini adalah untuk menemukan: 1) penerapan Word Square Model 2) tingkat kemampuan siswa dalam penguasaan kosakata sebelum dan sesudah penggunaan Word Square Model 3) apakah ada pengaruh yang signifikan dari Word Square Model terhadap penguasaan kosakata pada kelas Sebelas SMA Negeri 1 Saipar Dolok Hole. Metode yang digunakan adalah Experimental. Populasi dalam penelitian ini adalah seluruh siswa kelas Sebelas SMA Negeri 1 Saipar Dolok Hole. Ini terdiri dari 144 siswa. Teknik sampling yang digunakan adalah sistematic sampling untuk mendapatkan sampel terdiri dari 35 sorang. Teknik pengumpulan data dengan lembar observasi dan tes. Hasil dari penggunaan Word Square Model adalah 3.30, itu dikategorikan "Sangat Baik". Hasilnya menunjukkan nilai sebelum menggunakan Word Square Model adalah 47,24, itu dikategorikan "Gagal". Sementara skor rata-rata penguasaan kosakata setelah menggunakan Word Square Model adalah 73,72, itu dikategorikan "Bagus". Hasil uji ttes adalah 4.80 dan ttable adalah 2.04. ini berarti ada pengaruh yang significant menggunakan Word Square Model pada penguasaan kosakata pada siswa kelas Sebelas SMA Negeri 1 Saipar Dolok Hole.

**Kata Kunci :** Word Square Model, Penguasaan Kosa Kata

## I. INTRODUCTION

Vocabulary is crucial element in mastered English, they will have difficult to read the text due to the limit words understood by them. In order the achieve those goals, the students must be able to mastered the vocabulary. Vocabulary has a big part when we wish to mastered four basic skills in studying English, the four basic skills are Listening, Speaking, Reading and Writing. Vocabulary has a few part, such as Verb, Nouns, Adjectives, Adverb, Preposition, Conjunction, Pronouns and etc.

Vocabulary mastery must be done by everyone who want to master English, the lack of multiple vocabulary will make us leave in learning English. Another reason why we have to multiply vocabulary, is that the faour basic English are not to difficult for us to mastered.

The fact in field, many students not mastered the vocabulary, it can be seen from the mean of Pre-test. Based on the mean of score on pre-test, it is found that they only got 60, while the score in vocabulary 70 in average . From this reality, the writer wants to try to give a best model to improve their vocabulary.

There are many efforts that have done by the teacher and headmaster such as, teaching clearly, improve the strategy model or teaching method, complete the school facilities, give the motivation and also teacher asked the students to study at home, but the students still have low result.

If this problem is not solved completed then it will impact on the way students learn, especially in learning the other material in English subject, it is certainly will a problem that will be long in the future. If the students not master the voabulary, study other materials will be difficult to be accept, the basic of learning English one of them master vocabulary.

To solve this problem, should be diligent to study about the vocabulary mastery. And they should be support by Word Square Model which is one of strategy that can be use to various level of students, or is also can be focus on vocabulary mastery. It is to make learning interesting and students be more easy to mastery of vocabulary, still need improvement and it should thought clearly and wisely by chose the suitable model is Word Square Model.

Based on the explanation above, the writer takes interest to conduct a research about "The Effect of Word Square Model on Students' Vocabulary Mastery" (A Study at the Eleventh Grade of SMA Negeri 1 Saipar Dolok Hole).

### **1. The Nature of Vocabulary**

Vocabulary is a language that is important thing to be mastered by the students in learning foreign language, because it is a foundation for other language components such as pronunciation, spelling, meaning, and grammar. According to Sumaryati (2018: 1) "Vocabulary is an important key for anyone who wants master a particular language".

According to Alqahtani (2015: 22) "Vocabulary knowledge is often viewed as a critical tool for second languages learners because a limited vocabulary in a second language impedes successful communication".

Based on explanation above the writer conclude, vocabulary is very important and priority to anyone who wants to learning foreign language and vocabulary have a big influence to mastery english language. vocabulary is a collection of words or phrases which are usually arranged in square and translated of defined. vocabulary achievement is an important in the language skill and vocabulary is one of the needed components of language.

## 2. The Types of Vocabulary

Vocabulary have some of kinds and that be a factors of vocabulary, there are Noun, Pronoun, Verb, Adverb, Adjective, and Preposition. According to Khaisaeng et. Al (2017: 44) "Kinds of Vocabulary are one of the important components in studying any language and to help students and learners to understand and use the target language more efficiently".

### 1) Noun

Noun is word describing who or what in a sentence it can be a person, place, idea or thing. Noun is usually an essential part of any basic sentence. It's typically who or what the sentence is about, but other nouns are often also included in longer or more complex sentence. According to Algeo in Adebileje (2016: 45) "Noun along with verbs are a dominant part of speech, and that the semantic content of sentences is borne mostly by nouns".

### 2) Pronoun

Pronoun is a word that substitutes for a noun or noun phrase. It is a particular case of pro-form. Pronouns can be used in place of nouns (when appropriate), and pronoun operates just like a noun in a sentence. It's important to remember, however to use pronoun carefully.

According to Nelson in Hardiyanti et al (2015: 5) "Pronoun is very important to teach in order to make students to able to construct grammatical sentence".

### 3) Verb

Verb is a word use in a sentence to explain what a noun a person, place, or thing is doing or to explain what's being done to a noun. It's usually an action

word, but a verb can also explain an emotional/physiological/response or action, (like"feel") or mental action or state, (like"think") or a state being, which may not

typically be noticed or seen by others. According to Eastwood in Kurniawan et al (2016: 3) "Verb is a basic sentence structure that should be mastered by the second language learners".

#### 4) Adverb

Adverb are modifiers of verb , adjectives, other adverb or sentences. They are used to enhance one these types of words or a sentence. Adverb will answer at least one of the following five question there are: where, when, how, why and to what extent. According to Crystal in Zainab et al (2016: 2) "An adverb is used to qualify any part of speech, except noun or pronoun".

#### 5) Adjective

Adjective are descriptive word used in sentences to modify or describe noun or pronouns, and they typically (but not always) precede them. Adjective help add the meaning to message delivered in sentences by helping readers to better visualize or understand specifics about the nouns or pronouns they modify.

According to Greenbaum in Al-Hassani et al (2016: 10) "Adjectives are attributive when they pre-modify nouns, and they appear between the determiner and the head of the noun phrase".

#### 6) Prepositions

Prepositions are words used to show the relationship of a noun or pronoun to some other word in a sentence. According to Longman in Napitupulu (2017: 187) "Preposition is defined as a word that is used

before a Noun, Pronoun, or Gerund to show that word's connection with another word, such as of' in a house made of wood and by in We open it by breaking the lock." According to Wishon and Burks in Napitupulu (2017: 187) "Prepositions are always followed by Nouns or Pronouns".

### **3. The Nature of Word Square Model**

Word Square Model is a cooperative learning model that combines the ability to answer questions with carefulness in matching answer on the boxes of answer. Word square is one of many learning methods that teachers can use in achieving learning goals. According to Kurniasih and Sani (2016: 97) "Word square learning model is a model of the development of lecture methods that are enriched and be oriented to the activity of students in learning".

According to Istarani (2012: 181) " Word Square learning Model is a learning model that uses boxes in the form of crossword puzzles as a tool in delivering teaching materials in the learning process".

Based on explanation above, the writer conclude Word Square Model is one of many learning methods that development of lecture method and Word Square Model that combines the ability to answer question in matching answer on the box answer and teacher can use in achieving learning goals.

### **4. The Steps of Word Square Model**

Word Square Model is same with other model learning that have purpose to improve the result the student. According to Istarani (2012: 181) Word Square Model have five steps there are:

1. The teacher prepares the work sheet to be used in teaching and learning process.
2. The teacher convey the material according to competence to be achieved.
3. The teacher distributes activity sheets according to the sample.
4. Student answer the question then shaded the letter in the box according to the answer.
5. Give points for each answer.

Based on explanation above it can conclude that, steps of Word Square Model the teacher must prepare the activity sheet, and distribute to the students they will answer the question in the letters in the box according to the answer and the teacher will give the point for each other.

## **5. The advantages and disadvantages of Word Square Model**

### **a. The advantages of Word Square Model**

According to Istarani (2012: 183) some the advantages Word Square Model are:

- 1) Can facilitate students in mastering in mastering the teaching materials, because has directed to find the answer in a box.
- 2) Can facilitate teachers in decomposing material tools, because teacher can direct students to the boxes which have been prepared in advance.
- 3) Can improve the learning activities of children, because he will continue to shade letters in accordance with the answer.
- 4) Avoiding the boredom of children in learning, because that activities that do not make children bored and follow the learning.

### **b. The disadvantages of Word Square Model**

According to Istarani (2012: 183) some the disadvantages of Word Square Model are:

1. Making a variety of boxes require creativity of a teacher.
2. Often encountered between the available box does not match the existing question.

3. Creating question that require definite answer requires a high ability from a teacher.

## II. METHODOLOGY OF RESEARCH

Method is ways that use to measure or test something that is finishing research. In the research there are many kinds of methods that can be use, they are: descriptive method, experimental method, and comparative method. The writer use experimental method because this method is very suitable to find out cause-effect relationship between two factors.

According to Gay and Peter (2009: 5) "Experimental method is the only type of the researcher that can test hypothesis to establish cause-effect relations". According to Ary (2006: 265) "An experiment is a scientific investigation in which the researcher manipulates one or more independent variables.

Based on the explanation above the research design, it can be seen clearly from one group pre-test ( $O_1$ ) and post test ( $O_2$ ) to get the data dependent and independent variables, the writer use experimental research because to find out the cause effect relationship between the variables.

Population is part of the research that is very important in doing research, population is the all subject of the research. In a research, population can be means as a group of unit or part that is made as an object of the research. According to Setyosari (2010: 168) "The population sulks in the entire group from which samples are taken." According to Sugiyono (2014: 80) "Population is a generalization region consisting of object/subject which has certain qualities and characteristics set by the research to be studied and the drawn conclusion". Based on the explanation above, The Writer choose class Eleventh of SMA Negeri 1 Saipar Dolok Hole as population of this research. They are consists of



four class, they are XI IPA 1, XI IPA 2, XI IPS 1, XI IPS 2, the total of students are 144 students.

Sample is the group of individuals who actually participate in some of research, sample to benchmark the success or failure of a some research that we are carrying out. According to Masyuri and Zainuddin (2008: 159) "Sample dimunculkan oleh peneliti pada suatu penelitian disebabkan karena: peneliti ingin mereduksi (memotong) obyek yang akan diteliti". According to Suryani and Hendrayadi (2015: 197) "There are some kinds of taking sample technique they are: probably sampling, systematic sampling, quota sampling, snowball sampling, purposive sampling, incidental sampling, and judgment sampling". And the writer choose Systematic sampling.

According to Sugiyono (2014: 125) "Systematic sampling is a sampling technique based on the sequence of members of the population that has been given the serial number".

From the explanation above the writer conclude the technique of systematic sampling is the suitable technique to take the sample. From the students population of 144 students of which it give the number, that is 1-144. The sampling done by taking a multiple of number Five (5). So, the number of sample use are 35 students.

research. According to Bungin (2005: 94) "The research instrument is occupying a very important position in terms of how and what we should do to obtain data in the field". In this research have two variable, they are Word Square Model as dependent, dependent variable is a type of variable that is describe or influence by an independent variable or namely variable (X) and vocabulary mastery as independent, independent variable is a type of variable that explains or

affects other variable namely variable (Y). The indicators of Word Square Model are definition of Word Square Model, steps of Word Square Model and advantages and disadvantages of Word Square Model. The indicators of Vocabulary Mastery are, Noun, Pronoun, Verb, Adverb, Adjective, and Preposition. The technique of collecting the data that the writer choose is observation sheet and test.

#### 1) Observation sheet

Word square model as dependent variable use the observation sheet. According to Mustofa (2008: 56) "Observation is a method of collecting data in a systematic way through observation and recording to the phenomenon in the research". To measure the independent variable the writer using observation sheet to the teacher of english of SMA Negeri 1 Saipar Dolok Hole who guide the writer in the class when the writer apply Word Square Model. The observer will see whether writer has apply all the steps of Word Square Model and observer will see whether the writer has apply the steps of Word Square Model and the observer will fill the observation sheet which given by the writer. The observation sheet contain the question about how the writer apply steps of the Word Square Model in vocabulary mastery.

#### 2) Test

Vocabulary mastery as independent variable use the test. According to Mustofa (2008: 56) "Test is a method of collecting data that its nature to evaluation results of the process (pre-test and post-test). The instrument can be either exam questions or question for test".

The writer measure dependent variable by using test, vocabulary using pre-test and Post-test to measure vocabulary mastery students'. The test particular to match the two of sentence. The test use in this research to measure vocabulary mastery is multiple choice.

Data collection techniques are the ways done by the writer in collecting data in need, also can facilitate the writer in collecting data in the field. According to Mustofa (2008: 55) "The activity of collecting data in the research process requires precision, accuracy and detailed programming. There are some techniques of collecting data that can be used include: Questionnaires, test, observation sheet, and interview". To collecting the data the writer choose observation sheet and test.

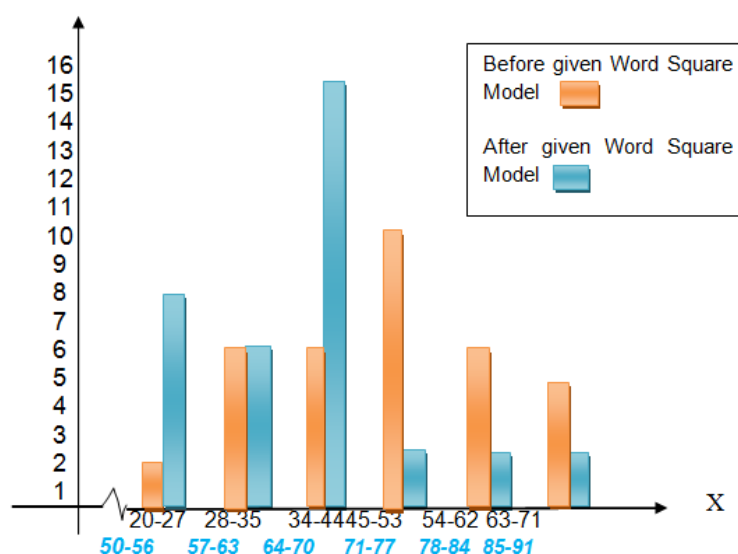
Technique of analysis data are techniques or methods undertaken by researchers to collect data. Data collection is done to obtain the information needed in order to achieve the research objectives. Meanwhile, data collection instrument is a tool used to collect data. In experimental research is always use statistical process to analyze the data. There are two kinds of data analysis, they are descriptive analysis and inferential analysis. Descriptive analysis is used to find mean, median and modus and so forth. While inferential analysis use of analysis hypothesis.

### **III. RESULT**

Based on the observation general view, it could be seen that the writer used Word Square Model and vocabulary mastery in class Eleventh of SMA Negeri 1 Saipar Dolok Hole through 20 of the questions of observation. While the maximum score that may be achieved was 4 and the minimum score was 1. it was found the highest score was 4.00 and the lowest score 2.00. it can be seen from

students more serious and interesting in learning Vocabulary Mastery by Word Square Model, in compare before using Word Square Model. So the mean score of Word Square Model 3.30. From the calculation, it was knowthat the application of Word Square Model on Vocabulary Mastery a study at the Eleventh grade students of SMA Negeri 1 Saipar Dolok Hole was categorized “Very Good”.

The score of students' Vocabulary Mastery before using Word Square Model, it was found the highest score was 70 and the lowest score was 20, it mean score was 47.24 categorized “Fail” And the score the students' Vocabulary Mastery after using Word Square Model, it was found the highest score was 90 and the lowest score was 50, the mean score was 73.72 categorized “Good”. After collecting the data. The researcher is going to test the hypothesis. However the testing hypothesis can befound after finding the score of each variable in mean, median, and mode. The data which is taken in accordance to the participant score on the instrument test responses were tabulated as the purpose of hypothesis testing that is mentioned previously, the data is analyzed by using ttest is 4.80 and ttable is known as number 2.04. After finding the score of ttest and ttable, both of the score are compared. it was found that ttest was higher than ttable ( $t_{test} > t_{table} = 4.80 > 2.04$ ).



From the result of the data calculation above it was shown that there was a significant effect of Word Square Model on students' Vocabulary Mastery at the Eleventh grade students of SMA Negeri 1 Saipar Dolok Hole.

#### IV. DISCUSSION

After given pre test and post test to the students, the writer found that the result of vocabulary mastery after using Word Square Model was better than before using Word Square Model it can be seen  $t_{\text{test}}$  is higher than  $t_{\text{table}}$  ( $t_{\text{test}} > t_{\text{table}} = 4.80 > 2.04$ ). Its meant that there was an improvement of students' mastery about vocabulary after using Word Square Model.

By looking the relevant studies which had been discussed in chapter II. Utami Setiyaning Tri (2017) "Application of Word Square Model in memorizing class III in MI TABIYATUL ATHFAL Kebarongan". After the data collect, the result of data analysis show that the learning activities using word square model in memorizing vocabulary on the subject of english class III in MII TABIYATUL ATHFAL Kebarongan make students more simple and easy to memorize the vocabulary taught. Then Aritonang Atik Riyana (2017) "The Effect of Scramble Model on students vocabulary mastery (a study at the tenth grade students' of SMA Negeri 1 Sayurmatangi 2017/2018 academic year). The result of  $t_{\text{observer}}$  is higher than  $t_{\text{table}}$  ( $t_o = 6.28 > t_t = 2,04$ ). From those analyses it can be concluded that there was improvement of students mastery about vocabulary after using scramble model.

Based on the theory which has been discussion in chapter II and also discuss in conceptual framework the writer throug Word Square Model, Word Square Model was presumed would bring the better effect. From the

conceptual framework, finally the writer made the hypothesis it was accepted by proving it with statistical process. From the previous explanation, the writer conclude that Word Square Model has good effect in vocabulary mastery.

### CONCLUSIONS

Based on the result of the research, the writer draws the conclusions that the score of the students achievement in writing recount text ability at the Tenth Grade Students of SMA Negeri 1 Saipar Dolok Hole, the writer concluded that 1) The Application of Word Square Model Based on the result of the research, the writer draws the conclusions that the score of the students achievement in Vocabulary Mastery at the Eleventh Grade Students of SMA Negeri 1 Saipar Dolok Hole, the writer concluded that 1) The Application of Word Square Model at the Eleventh Grade Students of SMA Negeri 1 Saipar Dolok Hole was categorized "3.30 " because it shows that the mean of the students score is "Very Good" 2) The students' Vocabulary Mastery before using of Word Square Model at the Eleventh Grade Students of SMA Negeri 1 Saipar Dolok Hole was 47.24 categorized "Fail" 3) The students' ability in Vocabulary Mastery After using of Word Square Model at the Eleventh Grade Students of SMA Negeri 1 Saipar Dolok Hole was 73.72 categorized "Good " 4) There is any significant effect of Word Square Model on students Vocabulary Mastery at the Eleventh Grade Students of SMA Negeri 1 Saipar Dolok Hole was the calculation of t-test was greater than the value of t-table (calculation  $4.80 > 2.04$  ). It means that there is a significant effect of Word Square Model on students Vocabulary Mastery at the Eleventh Grade Students of SMA Negeri 1 Saipar Dolok Hole. So, the hypothesis is accepted.

## REFERENCES

- Adebileje, Adebola. 2016. Forms and the Function of the English Noun Phrase in selected Nigerian text. *IOSR Journal of Humanities and Saocial Science (IOSR-JHSS)*. Nigeria. Vol. 2.
- Al-Hasaani et al. 2017. A Case Study of English and Arabic Adjectives in Attribute Position at Aden University. *International Journal of English Language Teaching*. Saudi Arabia. Vol. 4.
- Alqahtani, Mofareh. 2015. The importance of Vocabulary in Language Learning and how to be Taught. *International Journal Teaching and Education*. Saudi Arabia. Vol. 3.
- Ary, Donald. 2006. Introduction to research in education. Canada: Thomson Wdsworth
- Bungin, Burhan. 2005. *Metode Penelitian Kuantitatif*. Jakarta: Kencana.
- Gay, L.R and Peter, W Airasian. 2009. *Educational Research Competencies for Analysis and Application*. New Jersey: Pearson Education.
- Hardiyanti et al. 2015. Errors Made by the Seventh Grade Students Using Personal Pronoun. *E-journal of English Language Teaching Society (ELTS)*. Vol. 3.
- Istarani. 2012. *58 Model Pembelajaran Inovatif*. Medan: Media Persada.
- Khaisaeng, Sukany and Dennis K. Nutprapha. 2017. A Study of Part of Speech Used in Online Student Weekly Magazine. Thailand. Vol. 5.
- Kurniawan, Iwan and Seprizanna. 2016. An Analysis of Students' Ability in using Subject-Verb Agreement. *English Education: Journal tradis Bahasa Inggris*. Lampung. Vol. 9.
- Kurniasih, Imas and Berlin Sani. 2016. *Ragam Pengembangan Model Pembelajaran*. Medan: Kata Pena.

Masyhuri and Zainuddin . 2008. *Metodologi Penelitian. Pendekatan Praktis dan Aplikatif*. Bandung: PT Refika Aditama.

Mustofa. Bisri. 2008. *Metode Menulis Skripsi dan Tesis*. Yogyakarta: Optimus.

Napitupilu, Sependi. 2017. On Translation Preposition from English to Indonesian: A case Study of EFL Students. *International Journal of Linguistic*. Vol. 3

Setyosari, Punaji. 2010. *Metode Penelitian Pendidikan dan Pengembangan*. Jakarta: Kencana Prenada Media Group.

Sugiyono. 2014. *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta

Sumaryanti, Eka. 2018. *Master Book Vocabulary*. Yogyakarta. Episentrum Books

Suryani and Hendrayadi. 2015. *Metode Riset Kuantitatif*. Jakarta: Rineka Cipta.