

## **Students` Vocabulary Mastery After Applying Quantum Teaching Model In Module**

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### **ABSTRACT**

This research based on the problem regard English especially vocabulary mastery of the students. Students are most likely could not say something because they are lack of vocabulary and then students put in their mindset if English is one of the most difficult subject in this case. Applying quantum teaching model in module to improve the vocabulary mastery is suggested to solve the problem. The objectives of the research is to find out and analyze whether or not the Applying of quantum teaching model in module improve or not the students vocabulary mastery of the tenth grade students of SMK Negeri 3 SIDRAP. The researcher applied quasi-experimental design. The sample of the research was 38 students from two classes which taken from the population of the tenth grade students of SMK Negeri 3 SIDRAP. The researcher gave treatment based on the material that already formulated into some module and the test of the research was vocabulary test. The resulting of the data analysis shows that t-test value in post-test was 2.081 and the t-table value 2.028. Therefore, the students who taught trough Quantum Teaching Model in Module were better than the students who taught Contextual Learning Model.

**Keywords: Vocabulary Mastery, Quantum Teaching Model, Module.**

## ABSTRAK

Penelitian ini berdasarkan pada masalah kemampuan Bahasa Inggris terkhusus pada penguasaan kosakata. Kebanyakan siswa tidak mampu mengatakan sesuatu dikarenakan mereka kurang akan kosakata dan pada akhirnya siswa berpikir bahwa bahasa Inggris adalah salah satu pelajaran paling sulit. Pengaplikasian Quantum Teaching Model dalam Modul untuk meningkatkan penguasaan kosakata siswa mengusul untuk mengatasi masalah-masalah ini. Tujuan penelitian ini untuk mengetahui dalam menggunakan metode Pengajaran Quantum dalam module dapat meningkatkan penguasaan kosakata siswa-siswi kelas sepuluh SMK Negeri 3 SIDRAP. Peneliti menerapkan metode kuasi-eksperimen. Sampel penelitian terdiri dari 38 siswa dari dua kelas yang di peroleh dari total populasi kelas sepuluh SMK Negeri 3 SIDRAP. Peneliti memberikan materi berdasarkan materi yang telah disusun kedalam bentuk modul pembelajaran dan tes yang di gunakan yaitu test kosakata. Hasil dari analisis data menunjukkan bahwa nilai t-test pada post-test adalah 2.081 dan nilai t-tabel adalah 2'028. Hal tersebut menunjukkan bahwa siswa yang belajar dengan mengaplikasikan pembelajarn Quantum dalam module lebih baik daripada siswa yang di ajar dengan pembelajaran kontekstual.

**Kata kunci: Penguasaan Kosakata, Model Pembelajaran Quantum, Module**

## INTRODUCTION

Indonesia has so many natural resources, but the prosperity level of the people is still far from what is expected. It is also followed by the existence of ASEAN Economic Community (MEA) which becomes additional challenge .Therefore, Indonesian should be creative and have good capacity in order to rise up the quality of the human resources. One of the them is by having a good English mastery

In Indonesia, Particularly in National curriculum of Indonesia 2018, English has been recognized from elementary school up to University. In English there are four skills that need to be learned by the students in order to improve their ability in English such as listening, speaking, reading, and writing. English teaching is focused on those four languages skill as well as the four English aspects, namely structure, pronunciation, vocabulary, and grammar. The moment students can mastery those language skills and language components the moment the students can be success in learning some of language.

Vocabulary is basic fundamental of the language because the language cannot be formed without vocabulary. (Hassan and Abubakr, 2015:23) when someone in the learning process of a foreign language the vocabulary is the significant determiner because the more vocabulary that someone knows the more he or she can use the vocabulary to make a sentence. Nurhasanah, Asib, and Ngadiso (2017:664) state that vocabulary is a list of words particularly in foreign language and part sub skills of four language skills. Based on the definition the researcher can conclude if the vocabulary is the list of words which have an important role in language aspect and also vocabulary can help the people even in mother tongue or in the process of learning English as foreign language.

To master the vocabulary the researcher applied quantum teaching model in module. Quantum teaching is a learning model that focuses on student activeness and presents a fun learning process with the aim of improving student learning achievement. Quantum teaching itself has the basic concept or the main principle that is inviting students to our world (teachers) and bringing our world to their world (students). Solikhah (2017: 2) state that Quantum teaching model is a fun learning model and able to support the success of learning as well as maximize the momentum of learning itself. Quantum teaching is a learning model that brings students to play an active role in learning and use the basic knowledge that students need to develop knowledge and gain new knowledge (Ulandari and surya, 2017:121). DePorter (2000:5) state that Quantum teaching is the composition of the various interactions that exist within and around the learning process. These interactions include elements of effective learning that affect students' success in learning. And then module, module is a small unit in the lesson that includes instruction, teaching strategy that aimed at improving the ability (Sejpal, 2013:169).

## **METHOD**

This research was apply quasi-experimental method and it applied two classes as the sample, namely the experimental class and control class. Experimental class, the researcher taught vocabulary mastery through Quantum Teaching Model in module. In control class the researcher taught vocabulary mastery through Contextual Learning Model. The population of this research was tenth grade students of SMK Negeri 3 SIDRAP are 145 students which coming from various major but the researcher take Teknik Kendaraan Ringan one consisted of nineteen students and Teknik Kendaraan

Ringan two consisted of nineteen students as the sample of the research. The sampling technique was Cluster random sampling from the number of population. The researcher choose two classes as a sample of the research. The number of sample was 38 students.

To get the data. The researcher give The test and the test was given through pre-test and post-test. The students will do the test by giving a number of exercise. The total number of the test is twenty items which is divided into five numbers of fill the blank, five numbers for closest meaning question. Five numbers for matching words, and five numbers determining picture with the correct word.. Every number of test have 1 score if the answer is correct and zero point for incorrect answer.

## FINDINGS

After conducting the pre-tests and post-test both from experimental and control class. The researcher found some findings. Firstly, The Mean Score and Standard Deviation of Pre-test and Post-test

Table 1. The mean score and standard deviation of the students` pre-test of vocabulary mastery in experimental class and control class.

Class	N	mean score	standard deviation
experimental class	19	62.36	11.34
control class	19	59.73	10.98

Table 4.3 showed that the mean score of pre-test obtained by the students in experimental class is 62.36 and control class 59.73 it means that before giving treatment in the experimental class was not too different then the mean score in control class. It indicated that the students vocabulary mastery in both class was average same. And the standard deviation for experimental class 11.34 and control class is 10.98.

Table 2. The mean score and standard deviation of the students` post-test of vocabulary mastery in experimental class and control class.

type of test	N	mean score	standard deviation
experimental class	19	78.68	12.45

control class	19	70.00	13.94
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Table 4.4 showed that the mean score of pre-test obtained by the students in experimental class is 78.68 and control class 70. for the standard deviation of experimental class 12.45 and control class is 13.94. It means that after giving treatment in the experimental class there were differences between the mean score in control class. It means that the mean score of the post-test obtained by the two classes were not the same. At the level of significance 0,05 with degree of freedom (df) 36 ( $n_1 + n_2 - 2$ ) the result of calculation was showed in the following table.

Secondly, the students mean difference on vocabulary mastery. It is prove by the table below.

Table 3. The students mean difference on vocabulary mastery.

Class	Pre-Test	Post-Test	Mean Difference
Experimental Class	62.36	78.68	16.32
Control Class	59.73	70.00	10.27

Table 3. Showed that the mean difference in experimental class was 16.32 and control class 10.27 it mean that experimental class was greater than control class. By the table above it showed that the improvement in experimental class was higher than control class. Therefore, the student who were taught by applying quantum teaching model in module got higher improvement in vocabulary mastery than the student who were taught through contextual learning.

The last is hypothesis testing. It showed by table

Table 4. the result of calculation of level significance and t-test in pre-test and post-test on vocabulary mastery.

type of test	level of significance	t-test value	t-table value
pre-test	0,05	0.74	2.028

post-test	0,05	2.081	2.028
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Table 4. indicated that the t-test value was lower than t-table value. It showed by t-test value (0.74) indicated that null hypothesis ( $H_0$ ) of pre-test was accepted and the alternative hypothesis ( $H_1$ ) was rejected. Base on this analysis, it was concluded that there was no significance between the students' vocabulary mastery in experimental class who were taught by applying quantum teaching model in module than the student who were taught through contextual learning.

In post-test, t-test value was higher than t-table value. It showed by t-test value (2.081) It indicated that null hypothesis ( $H_0$ ) was rejected and the alternative hypothesis ( $H_1$ ) was accepted. Base on this analysis, it was concluded that there was a differences between students' vocabulary mastery in experimental class who were taught by applying quantum teaching model in module than the student who were taught through contextual learning.

## DISCUSSION

After comparing the resulting of the two tests, the researcher discussed the resulting of this research. The researcher supported by the previous chapters that the researcher has explained and also become the answer of the problem statement how this teaching model can solve the problem of the students in mastering vocabulary. Before conducting pre-test and post-test the researcher found some facts when the researcher was doing the observation in SMK Negeri 3 SIDRAP. It was explain as follow:

In teaching vocabulary, there were some of the previous researcher already mention that there are many ways in teaching vocabulary. But, there were only several ways which is related to the researcher method or technique in teaching vocabulary. Takac (2008:20) teacher as mediator provides some situation which consists of one sentence like a short scenario which they have clearly contextualized the lexical item of the word. Not only that, by giving several sentences then the learners guess the meaning on the basis of the cumulative effect of the sentences.

In doing the Quantum Teaching method, the researcher combined some media that is teaching module. It supported by some experts Solikhah (2017: 2) state that Quantum teaching model is a fun learning model and able to support the success of learning as well

as maximize the momentum of learning itself. DePorter (2000:5) state that Quantum teaching is the composition of the various interactions that exist within and around the learning process. These interactions include elements of effective learning that affect students' success in learning. Quantum teaching itself is guided by the concept of taking them (students) into our world (teachers) and bringing our world to their world. The researcher conduct the same way such as the researcher create world based on the students background that was engineering students. The objective of the use engineering aspect because the book for SMK only talking about the topic in general. Then the researcher come to bring the world which can be easy to understand by the students and it has fulfill the concept of quantum teaching model itself.

The use of module was really helpful for the students in learning process especially in learning English and it has combined with various skills such as listening, reading, speaking, and writing. There were some of advantage of module was mentioned by Sejpal (2013:171) if teaching module is very useful such as The learning process is more active, it establishes a scoring system, can be learned anywhere, users can learn without disturbing other lessons, modules can be provided for one person or group, flexible and suitable for applying with various patterns. more suitable for students who reach adulthood, students can control more than which they learned accept responsibility for learning, and has gained widespread access in the current educational scenario.

After looking for the applying quantum teaching model in module to improve the students vocabulary mastery of the tenth grade students of SMK Negeri 3 SIDRAP. The teaching model and module was interesting to the students because the student can study English by individual or group and know why they need to learn English and how important the English toward their major. The improvement occur by the mean score of the students (pre-test) before the researcher gave the treatment was only 62.34 for experimental class and 59.73 for control class. This score is categorized as fair achievement based on DEPDIKNAS classification in 2005 which fair score is 56-70 score. Comparing with the score after used Quantum Teaching model in module, the mean score was 78.68 for experimental class and 70.00 for control class. It is indicated that there was improvement of students' vocabulary mastery. Even if before and after treatment was given the majority of students were in fair and good classification, the students still low in the improvement of their vocabulary mastery.

The result of researcher also supported by some researchers who had been conducting their research in order to see the effect of quantum teaching model in teaching writing a descriptive text of students. It supported Wigati (2016) about writing ability. Wigati stated that method is one of the best way for the teacher in teaching writing a descriptive text and it is quantum teaching model. The learning purpose also can be reached. Not only that, Wahid (2017) in her research also stated that by using quantum teaching model will gain the interest of the student to learn English because there were some video that play be her and it can make the student be more interest toward the material.

Based on the research findings, the researcher concluded that there were many ways to improve the students' vocabulary ability and the researcher was inspired from the previous researcher. Thus, the researcher tried to combine the method and it was a new learning model which ever being conducted before in order to improve the tenth grade students' vocabulary mastery at SMK Negeri 3 SIDRAP at academic year 2018/2019.

## **CONCLUTION AND SUGGESTION**

After analyzing the resulting from pre-test and post-test, the researcher concluded that the resulting of the students' post-test was significantly higher than the students' pre-test and it was supported by the t-test calculation. It was proved that there was significant difference between two classes after giving treatment. It can be concluded that the Applying Quantum Teaching model in module was effective to improve the vocabulary mastery of the tenth grade Students of SMK Negeri 3 SIDRAP.

In this research also the researcher give some suggestion for several people who are related to this research as follows: for English teacher, A teacher is able to use Quantum Teaching method as one of the way in teaching English to improve the students' vocabulary. Not only that, Quantum Teaching model but also it can use in the other skills (listening, reading speaking, and writing) and sub skill (grammar, pronunciation). For the students, The student needs to practice more to improve their vocabularies. And then for the next researcher, Quantum teaching is one of the methods that can be used to improve students' Vocabulary mastery. Quantum teaching makes the students to love you as their teacher and the students active to face the learning process. Therefore, the next researcher suggested using Quantum Teaching method by applying another media in teaching vocabulary.



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