THE EFFECT OF THE APPLICATION OF CONTEXTUAL TEACHING AND LEARNING (CTL) ON THE STUDENTS' VOCABULARY MASTERY AT GRADE SEVEN OF SMP GAJAH MADA BANDAR LAMPUNG IN ACADEMIC YEAR 2013-2014

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Abstract

The objective of this research is to find out the effect of the application of Contextual Teaching and Learning (CTL) on the students' vocabulary mastery at grade seven of SMP Gajah Mada Bandar Lampung in academic year 2013-2014. Contextual Teaching and Learning (CTL) was applied to increase the students' vocabulary mastery which was used as one of visual method to help the students to master vocabulary and make them interested in learning English. The data was collected by in cooperating two pre-tests and two post-tests in experimental group and control group. Treatment using Contextual Teaching and Learning (CTL) was administered in experimental group, while control group received by other technique without any special treatment. The data analysis was attempted using t-Test for two group design. The result indicated that p-value 1% = 2.68, 5% = 2.00, and t-value = 3.77. It means that p-value is smaller than t-value. Therefore, hypothesis testing showed that null hypothesis (H_o) was rejected and alternative hypothesis (H_a) was accepted. The writer concluded that the application of Contextual Teaching and Learning (CTL) was more effective than other technique without any special treatment. It can be concluded that teaching vocabulary through Contextual Teaching Learning (CTL) is quite success. It can be seen on the result of calculated the students' score. Vocabulary scores that the students who learn vocabulary through Contextual Teaching Learning has a significant difference. It means that there is a significant influence of using Contextual Teaching Learning in teaching vocabulary.

Keywords: Contextual Teaching and Learning (CTL), vocabulary mastery.

1. INTRODUCTION

English is the first foreign language taught at every school in Indonesia. The Indonesian government chooses English as the first foreign language to be taught in schools. For example, English as a major subject is considered for the students from elementary school to university students. Therefore, they realize how important English in their life is. English as an international language is spoken all over the world. In the global era, English takes an important role as a communication language used in many sectors of life, such as trading, bilateral relationship, politic, science, technology and many others. People should understand and master English in order to gain broader knowledge, information and technology. Foreign language is a language studied in an environment where it is not primary vehicle in daily interaction and where input in that language is restricted (Murcia, 2001:359).

One of method that can be used in learning vocabulary is Contextual Teaching and Learning (CTL). Contextual Teaching and Learning is a learning that relates the material in their real life situation that encourages students to be able to apply them in their lives. They also know the meaning of their activities at school. For that reason, it can help the students become more understand about vocabulary. Sanjaya (2006:225) extended three things that we have to understand in Contextual Teaching and Learning (CTL). The first is Contextual stresses on the process of involving students to find the subject matter. Second is Contextual teaching and Learning (CTL) motivates the students to find the relationship between material and situation in the real life. Third is Contextual Teaching and Learning (CTL) encourages students to be

able to apply the material in the real own life. Furthermore, Howey R. and Keneth (2001) as cited in Rusman (2012: 189-190) state that Contextual Teaching and Learning (CTL) is teaching that enables learning in which students employ their academic understanding and abilities in a variety of in and out of school context to solve simulation or in the real world condition, both alone and with others. Besides, Komalasari (2010:6) states that contextual teaching and learning is a conception of teaching and learning that help teachers relate subject matter content to real world situations and motivate students to make connections between knowledge. This application is very interesting because the material to their lives in the hard work that learning requires. According to Dikdasmen (2003), as cited in Komalasari (2010, 11-13) states that Contextual Teaching and Learning (CTL) as a learning approach has 7 components that underline the application of Contextual Teaching and Learning (CTL). There are constructivism, inquiry, questioning, learning community, modeling, reflection and authentic assessment.

2. THE PROCEDURE OF CONTEXTUAL TEACHING AND LEARNING (CTL) IN TEACHING VOCABULARY MASTERY

Seven main components of CTL explained above are the main requirements in classroom teaching learning process. Below are the procedures how to apply CTL, including vocabulary class activity, in the classroom teaching learning process. (1)Improve the understanding that student will learn more effectively through self-learning, self-inquiring, and self-constructing using their own knowledge and experience. Teacher need to encourage student to actively involved in learning process and use the student's idea and experience to conduct the learning and whole learning unit. (2) Doing the inquiring activity to achieved desired competences in vocabulary activity. In this step, the teacher presents the vocabulary material (e.g. in the form of certain pictures or visual aid that describes some activities) in which the student need to analyze it by their self. Try to challenge the students with their own ideas and conceptions to interpret it. Allow them to present their own idea and encourage them to apply their own ideas, experience and interest to direct learning process. (3) Create learning community or learning in groups. This step will help student to improve their leadership and their cooperation among the student. In this step, the students discuss the material with their friends and then they present it in front of the class. To make the learning process more effective, teacher need to encourage the students to express their own ideas before the teacher did it. (4) Questioning as a learning tool. it is useful for improving student's curiosity. The teachers allow the students to ask something related to the material after the discussion and presentation session finished. It will give them more understanding in material discussed. (5) Do the reflection in the end of learning to make student feel that they have learned something. Provide enough time to reflect, analyze, and respect all ideas that are expressed by all students. Teacher need to engage the students in searching the information that can be applied in solving the problem in their own life. So, the learning process will give them many benefits in their real life.

3. METHOD

This method used quantitative type. Quantitative type is explanation of phenomena by collecting numerical data that are analyzed using mathematically based methods or in particular statistics (Muijs, 2004). Two groups is used in this method, there are experimental group and control group. In experimental group, there is treatment that the writer used CTL as method in teaching to improving students' vocabulary mastery. Then, in control group there is no special treatment. Meanwhile, variable is needed in this research. Sukardi (2009) stated that a population is all members of well defined class of people or objects. In this study the writer chose the seven grade of SMP Gajah Mada Bandar Lampung as the population of this research. The population will divide into two group classes. So, total of population is 165 students of grade seven in SMP Gajah Mada Bandar Lampung. Arikunto (1997) stated that a sample is a small group which is observed. In selecting the sample, the researcher used Random Sampling Technique as the sampling technique. The sample was taken 2 classes. The experimental group was class VIIa and the control group was class VIId. The experimental Group was taught vocabulary by using Contextual Teaching and Learning method while the control group was taught by using conventional method.

Therefore, the researcher selected two classes at grade seven students of SMP Gajah Mada Bandar Lampung as sample. They are VIIa as experimental group, which consists of 30 students and VIId as control group, which consists of 30 students. Technique that the researcher used in selecting sample was by using cluster sampling. This sampling technique was used because there were four classes in the grade VII of SMP Gajah Mada Bandar Lampung.

4. FINDINGS AND DISCUSSION

In conducting this research, there are some steps applied. The first is finding the research subject. The research subjects are the students of grade seven of SMP Gajah Mada Bandar Lampung in the second semester in academic year 2013/2014. There are four classes of grade VII. They are VIIa, VIIb, VIIc and VIId. In which each classes consist of 30 students. So, the total number of students at grade seven of SMP Gajah Mada Bandar Lampung is 120 students. The second is doing sampling of the research which is done by using total cluster sampling technique. Using the technique, grade VIIa and VIIc were randomly selected. Class VIIc was selected to be the experimental group by using Contextual Teaching and Learning (CTL). Meanwhile, class VIIa was selected as a control group was taught by using usually method that the teacher uses in that school. The sample consists of 30 students from the population 120 students. The pre-test for experimental group and control group were conducted after choosing the sample. Next, the treatments for experimental group were given for four meetings. Then, post test for two groups were administered after the treatments had been completely to conduct the experimental group.

The result of pre-test and post-test will be statistically analyzed using t-Test two group design in order to know an effect of the application of Contextual Teaching and Learning (CTL) on the students' vocabulary mastery at grade seven of SMP Gajah Mada Bandar Lampung. The t-Test for two group design is appropriately adopted in some steps to calculate the result of t-Test. Furthermore, the writer calculated each score of pre-test and post-test in experimental group and control group in this inquiry.

For control group (x) which is gained with the formula:

$$Mx = \frac{\Sigma X}{N}$$

Figure 1. Mean for control group.

$$Mx = \frac{277}{30} = 9.23$$

Based on the calculation above, the students' mean score of control group is 9.23. Then, the writer tried to calculate the deviation for control group by the formula:

$$x^2 = \quad x^2 - \frac{(\Sigma x)^2}{N}$$

Figure 2. Calculation of degree of deviation.

$$x^2 = 2937 - \frac{(277)^2}{30}$$
$$x^2 = 2937 - \frac{76729}{30}$$
$$x^2 = 2937 - 2557.63$$
$$x^2 = 379.37$$

Based on the calculation above, the deviation for control group is 379.37. The deviation is used to find out the standard error from mean of difference that would be used in analyze the data by using t-Test for two group design.

Meanwhile, My is the mean score of experimental group. The function is to calculate the mean of deviation in experimental group.

$$My = \frac{\Sigma y}{N}$$

Figure 3. Mean for experimental group.

Where:

My : Mean score of experimental group

y : the total score of difference

N : The number of the subject in experimental group

While for experimental group (y) which is gained with the formula:

$$My = \frac{\Sigma y}{N}$$

$My = \dfrac{470}{30} = 15.67$

Based on the calculation above, the students' mean score of experimental group is 15.67. Then, the writer tried to calculate the deviation score for experimental group with the formula:

$$y^2 = y^2 - \dfrac{(\Sigma y)^2}{N}$$

Figure 4. Calculation of degree of deviation.

$y^2 = 9422 - \dfrac{(470)^2}{30}$
$y^2 = 9422 - \dfrac{220900}{30}$
$y^2 = 9422 - 7363.33$
$y^2 = 2058.67$

Based on the calculation above, the deviation for experimental group is 2058.67. The deviation is used to find out the standard error from mean of difference that would be used in analyze the data by using t-Test for two group design.

Then, the writer applied all of them into t-Test formula. t-Test formula is used to know whether there is any effect of Contextual Teaching and Learning (CTL) on the students' vocabulary mastery at grade seven of SMP Gajah Mada Bandar Lampung or not.
It was presented as follows:

$$t = \dfrac{|Mx - My|}{\sqrt{\left(\dfrac{\Sigma x^2 + \Sigma y^2}{Nx + Ny - 2}\right)\left(\dfrac{1}{Nx} + \dfrac{1}{Ny}\right)}}$$

$$t = \dfrac{|9.23 - 15.67|}{\sqrt{\left(\dfrac{379.37 + 2058.67}{30 + 30 - 2}\right)\left(\dfrac{1}{30} + \dfrac{1}{30}\right)}}$$

$$t = \dfrac{6.44}{\sqrt{\left(\dfrac{2438.04}{58}\right)\left(\dfrac{2}{30}\right)}}$$

$$t = \dfrac{6.44}{\sqrt{42.03 \times 0.07}}$$

$$t = \dfrac{6.44}{\sqrt{2.94}}$$

$$t = \dfrac{6.44}{1.71}$$

$$t = 3.77$$

Based on the calculation above, the result of t-Test is 3.77. After that, the writer calculated the degree of freedom (df) by using formula:

$$df = Nx + Ny - 2$$

Figure 5. Degree of Freedom.

Where:
df : degree of freedom
Nx : the total subject in control group
Ny : the total subject in experimental group
So, the calculation of degree of freedom (df) as follows:
df = Nx + Ny – 2
df = 30 + 30 – 2

df = 58

Based on the calculation above, the degree of freedom (df) is 58. The function of degree of free is to find out the score in p-Value. P-value is a statistically value that details how much evidence there is to reject the most common explanation for the data set. P-value said to be significance, which is commonly 5% or 1% (see table of "p" value at degree of significance)

$$p\text{-value} = 1\% = 2.65$$
$$5\% = 2.00$$

Figure 6. Probability Value

t-value = 3.77 Therefore, p < t $\longrightarrow$ 2.65 / 2.00 < 3.77

The calculation of all the results which is the last result discussed gives findings. The data was analyzed by using t-Test formula. It indicated that p-value 1%=2.68, 5%=2.00 and t-value = 3.77. The result of the analysis showed that p-value was smaller than t-value. Therefore, null hypothesis (H_o) was rejected and alternative hypothesis (H_a) was accepted. Based on the findings of this study, it was found that there is significant effect of the application of Contextual Teaching and Learning (CTL) on the students' vocabulary mastery at grade seven of SMP Gajah Mada Bandar Lampung.

5. CONCLUSION AND SUGGESTION

The implementing of Contextual Teaching and Learning (CTL) in teaching vocabulary mastery is intended to build knowledge by engaging students' in real life situation. By using their experience in teaching learning process, they will be easy to understand the materials and applying it. This research aimed at finding the effect by using Contextual Teaching and Learning (CTL) on the students' vocabulary mastery at grade seven of SMP Gajah Mada Bandar Lampung in academic year 2013/2014 by administering two pre-tests and two post-tests, after that the researcher used t-Test for two group design to know the students' test result. Referring to the result of the research, it was seen that teaching vocabulary by using Contextual Teaching and Learning (CTL) can improve students' mastery in vocabulary. The result shows that t-observation is higher than t-value.

From the conclusion above, the writer would like to purpose some recommendations that can be given as follows:

First is for teacher. English teachers should choose certain methods that lead the students to become active learner. The students learn best when they experience what they are learning. By experiencing what they are learning, the students will become active learners not only waiting for teachers' transfer of knowledge. The teaching method also has to encourage the students' interest toward the lesson that they learnt. When the students get interest in teach English it will develop a good atmosphere in the class, so that the students learn easily and comfortably in their class. Second is for students. The students were suggested to do the following things. Moreover, they should learn actively in the classroom when teacher gave the instruction through Contextual Teaching and Learning (CTL). Next is for the school. The management of SMP Gajah Mada Bandar Lampung should support the learning and teaching process especially in learning English by providing some media that can be used by the teacher and the students' such as relevant books, English laboratory, Speaker, LCD, projector, flash cards. This can stimulate teachers' and students' interest in teaching and learning English better. The last is for other researchers. This research studies the implementation of CTL in improving the students' vocabulary mastery. It is hoped that the result of the study can be used as additional reference for further research in different context that will give contribution in teaching English for the students.

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