

TEACHING ENGLISH VOCABULARY BY USING PICTURE WORD INDUCTIVE MODEL (PWIM)

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Abstract

This research was aimed at discovering the effect of Picture Word Inductive Model on students' vocabulary achievement on the seventh grade students of SMP Negeri 14 Pontianak in academic year 2016/2017. This research was a pre experimental research with one group pre-test post-test design. The research population was 212 students from 5 classes and by using cluster random sampling, the researcher chose class VII A that consisted of 35 students as the sample of the research. The data were gained from pre-test and post-test and analyzed by using t-test. The mean score of the pre-test was 58.14 which classified as "poor to average" and the mean score of post-test was 77.86 which classified as "average to good". The finding showed that the t-test was 7.85. The t_{table} with degree of freedom (df) 34 and significance level at 0.025 was 3.0019. Based on the data analysis above, the t-test was higher than the t_{table} ($7.85 > 3.0019$) which means that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted. Moreover, the effect size was 1.78, that result was more than 1.00 ($ES > 1.00$) which is categorized as strong effect. To sum up, the use of Picture Word Inductive Model in teaching vocabulary give a strong significant effect to improve students' vocabulary achievement.

Keywords: Picture Word Inductive Model, Teaching Vocabulary, Vocabulary Achievement.

INTRODUCTION

Vocabulary plays an important role as the key aspect in learning English. Students' ability in using English is determined by their vocabulary. Without having sufficient vocabulary, the students are not able to express their idea and communicate effectively.

Studying a language cannot be separated from studying vocabulary because it is an essential part of language. Words support the speaker in communication to express their ideas. Vocabulary is the knowledge of meanings when listening or reading. It is very important for us to know the vocabulary to increase the vocabulary achievement. According to Elfrieda in Marbun (2014) Increasing the size of one's vocabulary, also called vocabulary building, is generally considered to be an important part of both learning a language in which one is already proficient. Richards (2002, p.4) defines

"vocabulary as one of the most obvious components of language and one of the first applied linguists turned their attention to".

Based on the definitions, it can be concluded that vocabulary is a list of words with their meanings especially one that accompanies a textbook in a foreign language. Vocabulary plays an important role in supporting the achievement of language skills namely listening, reading, writing and speaking.

In order to communicate well in English the students must have wide range of vocabulary. As Thornbury (2002, p.13) stated that vocabulary is one of the important aspects in learning English, without vocabulary nothing can be conveyed. The students can express their ideas effectively by using sufficient vocabulary, can understand the language task and foreign language conversation. If the students are

lack of vocabulary, the students have the difficulties in learning and understanding the foreign language.

Teaching and learning vocabulary is the first step for the students or learners who want to learn English. It is impossible for someone who learns English without knowing vocabulary. The more the students gain and know the words, the more they understand and it makes them easier to speak and share the ideas to others. In vocabulary teaching, the teacher can use some appropriate techniques and method so as to build up students' vocabulary.

Teaching vocabulary is one of the basic elements in achieving all four language skills. Teaching can be accomplished by showing and demonstrating, guiding, and directing the learner's efforts, or by combination of these actions. This is in accordance with Brown (1998, p.7) that said teaching means any activity of the person to show or to help others to know or to understand to the instruction given and to guide the knowledge.

According to Grade cited in Brown (1998, p.8) defines that teaching means any activities which are decided to facilitate learning, include the setting of condition for learning and to make the learner able to learn. It means that teaching and learning are two things that cannot be separated. Thus, teaching vocabulary is the first step for the students or learners who want to learn English. It is impossible for someone who learns English without knowing vocabulary. The more the students gain and know the words, the more they understand and it makes them easier to speak and share ideas to others.

Teaching vocabulary is not easy for teachers, especially in teaching Junior High School students where they often get bored easily during the learning. In line with this, the teacher should provide a good exercise or a way of teaching vocabulary, so that children enjoy and understand the learning process well. There are several ways in learning vocabulary at Junior High School, such as: using dictionary, picture, guessing,

reading, etc. Those ways could contribute a lot to be used in teaching vocabulary. In this case the writer took picture in teaching vocabulary, because through picture students can see person, place and thing directly. By the use of pictures which are more efficient and practice than word, and the pictures are easier to remember than words, further more they expose real life situation although it happens a long time ago.

One of teaching strategy which use the picture is Picture Word Inductive Model (PWIM). Picture word inductive model (PWIM) is an appropriate strategy in gaining the students interest in acquiring English as the foreign language in their early ages. It is because in their early ages most of them are very familiar with pictures in all sorts of theme. PWIM consists of pictures which are familiar to the students. The students have to identify the objects on the picture. It makes the students able to remember the vocabulary easily.

Picture Word Inductive Model (PWIM) is considered as one of the appropriate and applicable strategy that used by the teacher in the classroom, particularly in building up a large store of words. It developed by Calhoun (1999, p.21), which uses pictures containing familiar objects, actions and scenes to draw out words from children's listening and speaking vocabularies. A major principle of the model is that students have the capability to make generalizations that can help them to comprehend the text. PWIM uses an inductive process (in which students seek patterns and use them to identify their broader meanings and significance), as opposed to a deductive process (where meanings or rules are given, and students have to then apply them).

Picture Word Inductive Model (PWIM) is an appropriate strategy in gaining the students interest in acquiring English as the second language in their early ages. (Calhoun, 1999, p.24) says that for most of beginning readers and writers, the Picture Word Inductive Model (PWIM) is an interesting and enjoyable activity where the

students can enjoy gaining objects and events through picture. Basically PWIM is a strategy which use the advantage of the picture as the learning media in teaching and learning process. PWIM consists of picture which are familiar to the students. It is to make the students able to identify it easily. Picture which used in the material are having some keywords to make the students find out what they read and write about.

According to Joyce (1998, p.125), the most beginning readers and writers enjoy findings objects and actions in the picture, seeing the words and sentences they generate expressed in print and become part of the curriculum, classifying words and sentences, discovering usefull language concepts and generalizations. Learners succeed using the strategy because the PWIM is based on inquiry in to how children learn and how to enhance their learning, including their development of language, the process of learning to read and write, and the reading writing connection. PWIM contains familiar objects, actions and scenes, the students can hear and see the words spelled correctly and directly, then they analyzed word by word for example; phonetic, synonym, antonym, or how to spell it. The students also can read the vocabulary, therefore it can make the students understand and make it easier to memorize the vocabulary.

METHOD

The form of the research is quantitative approach which guides the research to answer the research problem which is about does the reciprocal teaching technique improve students' reading comprehension of narrative text. Creswell (2012, p.22) says "a quantitative approach is one in which investigatory primarily uses postpositive claims for developing knowledge (i.e., cause and effect thinking, reduction to specific variables and hypotheses and questions, use of measurement and observation and the test

Pontianak in the academic year of 2016/2017 as sample of this research. The sample consist of 35 students.

of theories), employs startegies of inquiry such as experiments and survey and collect data on predetermining instruments that yield statistics data." The method of the research is experiment research and use pre-experiment research design. According to Creswell (2012) in an experiment research the researcher test an idea (practice or procedure) to determine wheather it influence outcome or depend variable. In this research, the researcher tested the idea about Picture Word Inductive Model (PWIM) as a technique can influence the students's vocabulary achievement. It is necessary to describe the design to be used when the research is conducted. In this research, the researcher will apply a pre experimental design. Pre-experimental design is referred to intact group comparison which is proposed by Tuckman (1972).

The design of this research is one group pre test – post test design. The writer applied this design in order to know the students' basic score toward the subject in pretest and to determine whether the treatment give any effect on the outcome by assigning posttest.

Cohen, Manion, & Morrison (2007) defined population as all members of any well-defined class of people, event, or object and defined sample as the small group that is observed. This research took place at SMP Negeri 14 which is located in Pontianak. The population of this research is the Seventh Grade Students of SMP Negeri 14 Pontianak in Academic Year 2016/2017 which are divided into six classes with the total number of students is 212 students.

In this research the writer used a cluster sampling in determine the sample. According to Alvi (2016), cluster sampling technique is used when the elements of population is divided into sub-class called as clusters on the basis of their class. The writer put name of group class on a slip of paper to select the sample. The writer took class A in the first grade students of SMP Negeri 14

Choosing and using an appropriate technique to collect the data of research is important. In this research, the writer used

measurement technique to collect the data of proficiency from those 38 students before and after treatment. The measurement was done for both pretest and posttest. The writer

Regarding with the data are obtained by using measurement technique, the writer focuses on a simple vocabulary test as a tool. A vocabulary test made by the writer, the writer used for pre and post tests to measure the participant's vocabulary gains from the training program. The test is used to know the students' achievement in mastering vocabulary, but also useful to improve the memory of words that they had learnt.

This test consists of 20 items with four alternatives answers (a, b, c, or d). Namara (2000) mention that multiple-choice is format test questions in which learners need to choose one of number from presented alternatives, and there is only one number which is correct.

To know does the use of Picture Word Inductive Model (PWIM) significantly

used statistical data to measure the result of both pretest and posttest. Then, the writer presented the result of students' outcome and effect size toward the treatment.

affect students' vocabulary or not, the researcher analyzed the data by using t-test.

$$t_{test} = \frac{\bar{X} - \bar{Y}}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2} - 2r \left(\frac{S_1}{\sqrt{n_1}} \right) \left(\frac{S_2}{\sqrt{n_2}} \right)}}$$

Where :

\bar{X} = mean scores of the students' before treatment

\bar{Y} = mean scores of the students after treatment

S_1^2 = variance score before treatment

S_2^2 = variance score after treatment

n = total of the students

r = correlation score

S_1 = standard deviation before treatment

S_2 = standard deviation after treatment

RESULTS AND DISSCUSIONS

Results

To answer the research problem, the writer is needed to analysis on the student's individual score of pre-test and post-test. The numbers of question is 20 with four alternatives answers. Then, the computation of data start from computing mean score of pre-test, post-test, the varians, the writer also calculated the standar deviation. After that, the writer computed the correlation between pre-test and post-test. The last is the writer

$$\begin{aligned} \overline{MX} &= \frac{\sum X_i}{n} \\ \overline{MX} &= \frac{2035}{35} \\ \overline{MX} &= 58.14 \end{aligned}$$

Meanwhile, the total score of post-test of the learning group is 2725 and the number of the students is 35. Therefore, the mean score was calculated as follow:

$$\overline{MY} = \frac{\sum Y_i}{n}$$

analysis the student's significance score of pre test and post test. It computed by using t (test) formula. Using the t-value, the effect size is computed.

The total score of pre-test of the group is 2035 and the number of student is 35. Thus, to obtain the mean score, this score is divided with the number of students in the group. The mean score was calculated as follow :

$$\begin{aligned} \overline{MY} &= \frac{2725}{35} \\ \overline{MY} &= 77.85 \end{aligned}$$

After that, the researcher calculated the T-Test in order to know does the use of Picture Word Inductive Model (PWIM) significantly affect students' vocabulary or not.

$$t_{test} = \frac{\bar{X} - \bar{Y}}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2} - 2r \left(\frac{S_1}{\sqrt{n_1}} \right) \left(\frac{S_2}{\sqrt{n_2}} \right)}}$$

$$t_{test} = \frac{58.14 - 77.86}{\sqrt{\frac{101.59}{35} + \frac{143.06}{35} - 2(0.1) \left(\frac{10.07}{\sqrt{35}}\right) \left(\frac{11.96}{\sqrt{35}}\right)}}$$

$$t_{test} = \frac{-19.72}{\sqrt{(6.99) - (0.2)(1.70)(2.02)}}$$

$$t_{test} = \frac{-19.72}{\sqrt{(6.99) - (0.68)}}$$

$$t_{test} = \frac{-19.72}{\sqrt{6.31}}$$

$$t_{test} = \frac{-19.72}{2.51}$$

$$t_{test} = -7.85$$

Based on the calculation above, the writer analyses the difference of pre-test and post-test in students' vocabulary test to determine the significance after the students being treated using Picture Word Inductive Model (PWIM) by t-test. The writer counting the t_{ratio} ("t-test" of the result of counting) by using the above formula. The t-test score is 7.85. Then, the writer determine $t_{critical}$, where $\alpha = 0.025$, because the writer used two tailed test. After that, the writer checked the t-distribution table of significance (t-table) $-t : df = n-1$, the writer found: $df = 35 - 1 = 34$. Since the result of df was 34, then the t-table value is 3.0091. Then the writer compared between t_{ratio} and $t_{critical}$ ("t" critical value in "t" table), the result of statistical analysis shows that t_{ratio} is higher than $t_{critical}$ ($7.85 > 3.0091$).

Discussions

From the data analyzed, it was found that the students' vocabulary achievement increased significantly after the class received a three times treatment by the application of Picture Word Inductive Model indicated by the mean of the post-test which is higher than the mean of the pre-test. The increase of the mean indicated that, generally, the treatment gave a good impact on the students' vocabulary achievement, so that the post-test result showed a better output than the pre-test. From the tabulation of the finding, the calculation of t-test showed that the obtained value exceeded the given value which meant the use of Picture

Word Inductive Model was effective, and in line with this, the result of the calculation of the Effect Size was categorized as highly effective which led the researcher to conclude that the use of Picture Word Inductive Model gave highly significant effect in teaching vocabulary on short functional text in form of shopping list.

The findings of the present study were in line with the existing research findings which revealed that there was a significant difference in student's score before and after the strategy was applied indicated by the result of the statistical calculation that showed that the value of t observation was higher than t table which consequently resulted in the rejection of the null hypothesis.

Besides being indicated by the statistical calculation, the effectiveness of Picture Word Inductive Model strategy on students' vocabulary was also shown by the students' learning process when the treatments were given where they became actively engaged in the activities conducted by the researcher. Being active here meant they were not only sitting, and reading, and paying their attention to the researcher's explanation, but they were able to work on several activities actively with their teammates. It was in line with the theory proposed by Calhoun that confirmed that the strategy was considered appropriate for teaching vocabulary as it encourages the students to have the capability to make generalizations that can help them to comprehend the text. During the treatments, the researcher discovered that the students could follow the procedure in applying Picture Word Inductive Model easily although the researcher sometimes had to give the instruction more than once to avoid them from being confused. The students who were already paired off in the team got along well and did all the intended activities correctly.

With regard to the highly significant effect the Picture Word Inductive Model gave on students' vocabulary, there were some causes that might have influenced it.

The successfully done treatments more or less influenced the results of the study. Since the very first treatment given, the researcher tried to carry out the learning process based on the lesson plan made before. So it can be ensured that this research had been going in line with the procedures of what it was supposed to be like. During the very first treatment, to avoid students' confusion, the researcher introduced each step of the procedure in applying Picture Word Inductive Model. The researcher then introduced the learning topic which was short functional text in form of shopping list and showed the students a picture related to the topic, and asked the students some questions related to the picture. After doing a brainstorming activity, the class was divided into some groups which members were already determined by the teacher. There were seven groups with five students as the number of the students was 35. The researcher then put a picture on the whiteboard and handed each group a worksheet on which the students would work on the same picture together and making a shopping list from the picture. These steps and the next ones were repeated in the second and third treatment.

The next step would mostly be the students' part. The students would identify what they see in the picture. After identifying, the researcher asked them to label the picture by draw a line from the identified object and write the word of the picture. Then the researcher ask the students to guess the meaning of each words later they check it on the dictionary. After that, the students have to read the words and classify the words into a variety of groups. For example carrot, potato, and cucumber belong to vegetable. After classifying, they have to and review the picture word chart by say the word, spell it, and say it again.

In the second and the third treatment, the students were getting familiar with Picture Word Inductive Model. They were more ready and also prepared themselves before the class began. Thus in the second treatment, the researcher require

the students to work in pair rather than in a group and for the third treatment, the students work individually in making a shopping list based on the picture and answer some questions related to the text. The repeated activities in each treatment were actually to improve their vocabulary which consequently resulted in their improved scores in the post-test than ones on the pre-test. Moreover, the calculation of the Effect Size was categorized as highly effective that led the researcher to reject the Null Hypothesis and concluded that the use of Picture Word Inductive Model gave highly significant effect in teaching vocabulary on short functional text in form of shopping list on the seventh grade students of SMP Negeri 14 Pontianak in academic year 2016/2017.

CONCLUSIONS AND SUGGESTIONS

Conclusions

Referring to the findings of the study, it was found that the use of Picture Word Inductive Model in teaching vocabulary on short functional text in form of shopping list was effective indicated by the mean of the post-test which was higher than the mean of the pre-test. The activities in applying Picture Word Inductive Model enabled students to actively participate in the learning process and have better vocabulary achievement which could directly be observed from the result of the treatments, that the students were able to outscore significantly on the test after the strategy was applied. In addition, this strategy also helped to raise students' interest in vocabulary activity shown by their positive response to the learning process when the treatments were being conducted.

Besides that, in this research, the use of Picture Word Inductive Model was able to make the students learn autonomously as the students realize that they need to learn vocabulary first if they want to master other skills of English. Moreover, the teaching learning activities conducted by the researcher had been systematically arranged so the students would be able to follow the

instructions and find the learning process interesting and enjoyable for them. This was what made it consequently resulted in the highly significant result of the Effect Size which responded positively to the research questions formulated by the researcher, which were to seek out the effectiveness of Picture Word Inductive Model strategy on students' vocabulary of SMP Negeri 14 Pontianak.

In addition, Picture Word Inductive Model was effective to be applied in promoting vocabulary as it provided information of the unknown words, make the students actively engage in learning vocabulary, and can be use as a tool to review any material. This research showed that the researcher or the teacher who applied Picture Word Inductive Model in the classroom had an important role in planning and implementing well-arranged activities as it was considered as one of important factors that contribute to the success of Picture Word Inductive Model. Well-managed classroom would make students engaged actively to enhance their learning.

Suggestions

From the conclusion above, the researcher would like to make some suggestions dealing with the result accomplished as : 1) For the teacher, the teacher can apply Picture Word Inductive Model especially in teaching vocabulary as an effort to improve students' vocabulary. Besides that, to get better result in students' understanding, the teacher should ensure that the learning process conducted follow the instructional procedures. The teacher should be able to conduct a fun and stress-free learning environment so that the students able to enjoy their learning and avoid them from getting bored. The result of this study is also expected to enrich the teacher's knowledge about Picture Word Inductive Model so that they can carry out a more effective learning process. 2) For the students, by using Picture Word Inductive Model, the students hopefully get their vocabulary improved. Besides that it also

hopes that Picture Word Inductive Model able to increase students' autonomy in learning vocabulary. 3) For the researchers who are going to conduct the same study, it is suggested to use more reading passages in different text types, and is able to explore Picture Word Inductive Model more to conduct a more effective learning process to create meaningful learning experiences.

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