The Implementation of Problem Based Learning Model to Improve Reading Comprehension Achievement

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Abstract: The purpose of the study was to know whether or not it was effective to improve reading comprehension achievement by implementing Problem Based Learning (PBL) model of the eighth graders of State Junior High School 3 of Lempuing OKI. In doing this research pre-experimental method with one group pretest-posttest design was used. The population of this study was all the eighth grade students of State Junior High School 3 of Lempuing OKI with the total number 115 students and the samples were 29 students in experimental group from VIII.1 class taken by cluster random sampling. The data were collected through reading comprehension test in multiple choice questions and analyzed by using matched t-test formula. The findings of the study showed that there was a significant difference between the students' score in the pretest and posttest. The students' average score in posttest was 75, higher than the students' score in pretest which was 60.43. The result of the matched t-test was 19.69 that exceded its critical value of the t-table 1.701. It means that the implementation of PBL model was effective to improve reading comprehension achievement of the eighth graders of State Junior High School 3 of Lempuing OKI.

Reading is one of an important skill in learning English that has to be learned and mastered by every students. By reading, students can interact with the feelings and thoughts, and reading is a way to get information from something that was written. Reading is one of the basic skills and is very important for the students either during following the education in various level of the kind of school or after going to school or working in society. (Arisman & Haryanti, 2018: 325).

Reading, for Junior High School students "is always as the center of their activity in the classroom. The students spend most of their time to do reading task since most of the activities done in the classroom usually deal with reading" (Elita, 2013:65-66). As we know that reading is an essential part of language learning at every level because from reading we are getting and constructing the meaning from a printed or written message.

Based on the results of interviews with the English teacher of Junior High School 3 of Lempuing OKI, the students were difficult to find the meaning about what they have read because the students have limited vocabulary, they got difficulties to catch the point or information of the text, they were difficult to deduce the content of the text paragraph and also generate the new ideas by their own words based on the text and shared it to others. This study which entitles "the implementation of problem based

learning model to improve reading comprehension achievement of the eighth grades of State Junior High School 3 of Lempuing OKI" will be limited on reading narrative text with the theme "legend". Based on the main problem above, the objective of this study was to know whether or not it was effective to improve reading comprehension achievement by implementing Problem Based Learning (PBL) model of the eighth graders of State Junior High School 3 of Lempuing OKI.

To overcome this problem, the writer tried to give one of the solutions by implementing Problem Based Learning (PBL) model to improve students' reading comprehension achievement. The students were helped by using Problem Based Learning (PBL) model so that they can mastery vocabulary and they can develop their comprehension in reading. Problem Based Learning model is a good technique to help students for develop their interest in reading, especially in narrative text. This learning model has steps that guide students to scientific thinking and determine the problem. Moreover, "Problem Based Learning is one of the innovative models that creates active learning conditions and engages students to solve a problem through a scientific method" (Sumantri, 2015 as cited in Ramdiah et., al 2018, p.30).

According to Komiyama (2009:32) "reading is an important skill for English language learners in today's world; it supports the development of overall proficiency and provides access to crucial information at work in school". Reading is recepting, analyzing, and interpreting activities carried out by the reader to obtain the message to be conveyed by the writer in the written discourse. There are some reasons why reading becomes so important. First, reading gives many exposures to students' language acquasition. They will unconsciously learn a new word, grammar and extract meaning of the word in contexts. When they read, they get many kinds of language exposures from many different kinds of texts, they repeat the exposures and easily memorize them. Second, reading texts provide a good model for English. A good model of text is important to be given in teaching English. Hence, it helps students recognize the pattern of phrase, clauses, and sentences within the text.

According to Varita (2017:236), comprehension is an important aspect of reading. Reading comprehension is basically the essence of the reading process. In addition, reading comprehension is an activity with a purpose. It can be concluded that the reading comprehension is a basic receptive skill which from reading the readers can get

and receive information from written discourse, the readers are required to understand the contents, and reading is an interactive process between the reader and the writer.

According Nusri and Syafar (2017:83), in reading, there are several genres of the text that need to be learned by the students such as; descriptive, narrative, report, and recount. Dirgeyasa (2016:16) stated that, narratives can also be written to teach or inform, to change attitude/ social opinions e.g soap operas and television dramas that are used to raise topical issues. Narratives sequence people/characters in time and place but differ from recounts in that through the sequencing, the stories set up one or more problems, which must eventually find a way to be resolved. The generic structure includes: a) Orientation, sets scence and introduces the characters; b) Complication, the problem or crisis comes out; c) Resolution, the problem is resolved for better or worse. Narrative text has many types, according to Arisman and Haryanti (2019:327-328), they are typically imaginary included fairy stories, mysteries, science, fiction, horror stories, adventure stories, romances, parables, fables, moral tales, myths, legend, and historical stories but can be factual included autobiography and biography or the combination of both.

According to O'Grady, et al., (2012:4), Problem Based Learning is an educational strategy where learning is driven by a problem. The problem could be challenge or a description of a difficulty, a curious outcome, or an unexpected happening. Moreover,several features of problem based learning are important in achieving the goals. These include the overal PBL tutorial process, facilitation, problems themselves, collaboration, self-directed learning, and post-problem reflection (Bridges, 2012:4). Rayne and Symon (2005 as cited in Kaganang, 2019:47) mention that Problem Based Learning consists of several components as follows:

a. Group Work: the students work together in small group and provide a framework in which students can test and develop their level of understanding of the material.

b. Problem Solving: the problems given in a given PBL environment are often daily problems that the students face every time in their life that need enquiry and critical thinking to solve it.

c. Discovering new knowledge: in order to find a meaningful solution, student will have to seek new knowledge.

d. Real world based: the problem to be solved through PBL is the problem in the real life.

Problem Based Learning, according to Arends (in Apriono, 2014 as cited in Kaganang, 2019:47) consists of the following steps:

a. Orientation: in this step, the teacher conveys learning objectives clearly to the students.

b. Organization: Problem Based Learning requires a good collaboration skill.

c. Investigation: this is the step or stage where the students start investigating the problem.

d. Presentation: the students are allowed to present the result of the group discussion and to suggest the attempt to solve the given problem.

e. Analysis: in this final step, the teacher assists the students to analyze and to evaluate their own throughts that they have.

In the process of teaching and learning using Problem-Based Learning, Keong and Mohammed (2015:91) on their research mentioned the strategy includes seven following steps:

1. Teacher gives the topic or problem that suit students' academic level.

2. Teacher classifies students into pair.

3. Teacher gives guided questions to make the discussion run well or easier and makes students understand what must be done (i.e how to solve problem), thereafter, students can formulate related questions to the topic.

4. Discuss in pair where students A ask students B the guided questions provided by teacher (i.e. how to solve problem) based on their own way.

5. Teacher gives time for each pairs to express their idea.

6. If time is over, either the asker or answerer has to be changed.

7. Teacher asks students to retell the results of discussion to class randomly.

According to Arjuna and Jufri (2016:3110-311) there are some advantages of using Problem Based Learning (PBL):

a. Problem Based Learning promotes self-motivation and facilitates more enjoyable and effective learning.

b.   Problem Based Learning is able to increase student's self direction. As students pursue solutions to their classroom problem, they tend to assume increased responsibility for their learning.

c.   Problem Based Learning encourages learning from experience, allowing students to use and organize what has been learnt to understand problems.

d.   Problem Based Learning develops teamwork and communication skills. Problem based learning incorporates collaborative teams in the solving of relevant problems.

e.   Most students retain and use little of what they memorize in classroom situations.

According to Shoimin (2014: 132) there are some disadvantages of using Problem Based Learning (PBL):

a.   Problem based learning cannot be applied to every learning material, there is a part of the teacher's section playing an active role in presenting material. Problem based learning is more suitable for learning that demands certain abilities related to problem solving.

b.   In a class that has a high level of diversity of students there will be difficulties in the distribution of tasks.

RESEARCH METHODOLOGY

The method of this research was Pre-Experimental designs with one group pre-test and post-test design. According to Hatch & Farhady (1982:19), Pre-experimental designs are not really considered model experiments because they do not account for extraneous variables which may have influenced the results. Moreover, according to Fraenkel et al., (2012:269), in one group pre-test and post-test design, a single group is measured or observed not only after being exposed to a treatment of some sort, but also before.

In collecting the data, the writer used multiple choice in written test. Before giving a test to the students, the writer gave pre-test, after that the writer gave teaching and learning activity as treatment by using problem based learning model. After treatment was given, the teacher gave post-test to the students. The test consisted of 40 items in the form of multiple choice questions. Before giving the test to the students, the

writer did a try out to know the reliability of the questions. The test was given to class VIII.2 and there were 28 students attending the try out.

FINDINGS AND DISCUSSION

In this study, two classes were chosen, they were VIII.2 (as the try out class) and VIII.1 (as the experiment class). The students were given reading test which used multiple choices as type of test especially in narrative text with the theme "legend". The students' average score in pre-test was 60.43. The highest score was 77.5, the lowest score was 47.5, and the students' average score in post-test was 75. The highest score in post-test was 87.5 and the lowest score was 62.5. Matched t-test calculation between the students' score in pre-test and post-test was 19.69 where the value of t-table was 1.701 at significance of 5% (0.05), with the df 29 students. Therefore, t-obtained was higher than t-table. It indicated that the alternative hypothesis (Ha) was accepted and null hypothesis (Ho) was rejected. It was found that the implementation of problem based learning model to improve reading comprehension achievement of the eighth grades of State Junior High School 3 of Lempuing OKI was effective.

Before the treatment, the students was given the written test in multiple choice questions. The pre-test consisted of 40 items. After the score had been tabulated, it was found that students' average score in the pre-test was 60.43. It means that, their ability was good enough. The highest score was 77.5 that was reached by one student and the lowest score was 47.5 that was reached by two students. The total number of students was 29 students.

In pre-test, there were 6 students (20,7%) in good qualification, 16 students (55,17%) in enough qualification and 7 students (24,13%) in poor qualification. After taking the pre-test, the students were conducted to learning reading comprehension by implementing problem based learning model. The writer gave the post-test to the students which aimed to know the students progress in learning reading after treatment. The test item in the post-test were exactly the same as those in the pre-test. It was given after the writer had already presented the treatment.

Based on the analysis of the post-test, it was found that the students' average score in the post-test were 75. It means that, the students's ability was better than before. The highest score was 87.5 that reached by one students and the lowest score

was 62.5 that reached by two students. The total number of students was 29 students. In post-test, there were 7 students (24,13%) in excellence qualification, 18 students (62,07%) in good qualification and 4 students (13,8%) in enough qualification.

The writer used matched t-test to find out whether implementing problem based learning model to improve students' reading comprehension was significantly effective. From two results of pre-test and post-test, it showed that the students' score was increased. Their average score in the post-test was better than in the pre-test. In the students' average in pre-test showed 75. This average score was higher than the students' average score that they reached in the pre-test was 60.43. Meanwhile, the average score in the post-test has increased to 75. The calculation from the students' score in the pre-test and post-test was done through the matched t-test. It is kind of formula in order to find out whether or not it was significantly effective to implement problem based learning model in teaching reading, especially reading comprehension.

It was found that t-obtained which was gotten through matched t-test was 19.69 . At the significant level of 0.05 for one tailed test and the degree of freedom (df) 28, the t-table score was 1.701 . Since the t-obtained was higher than t-table (19.69 > 1.701), the alternative hypothesis (Ha) was accepted and the null hypothesis (Ho) was rejected. It means that the implementation of problem-based learning model to improve reading comprehension achievement of the eighth grades of State Junior High School 3 of Lempuing OKI was effective.

CONCLUSIONS AND SUGGESTIONS

Based on the result of the data, there was significant difference between the average score of the students' pre-test and post-test. It means that the treatment by implementation problem-based learning model increased their score in better level. More of students were able to improve their reading comprehension achievement. It indicated that problem-based learning model allowed the students to get more reading. Furthermore, problem-based learning model was apropriate to be used as one alternative way in teaching reading.

In pre-test, the writer found out that some students had enough good knowledge in reading comprehension. It could be seen from the students' average score in the pre-test was 60.4. Meanwhile, in the post-test, most students were more able to understand

the reading comprehension. It could be seen in students' average score in the post-test, that was 75. It means that the students' ability in reading comprehension achievement before being taught through problem-based learning model was in lower level and after they were taught through problem-based learning model, it became better. Obviously, they made progress.

In addition, the result of matched t-test calculation was 19.69 and the t-table was 1.701 with the significance level 5% in one tailed testing and df = 28 (29-1). T-obtained was higher than t-table (19.69 > 1.701). Therefore, the alternative hypothesis (Ha) was accepted and the null hypothesis (Ho) was rejected. It means that the implementation of problem based-learning model to improve reading comprehension achievement of the eighth grades of State Junior High School 3 of Lempuing OKI was effective.

After conducting this research, there are still many students who have difficulty in reading especially working on reading text questions. This can be seen from the scores that students get in English exams which tend to be low. As for the factors suspected to be the cause are: the limitations of students in mastering English vocabulary so that when students work on questions in the form of reading texts they found it difficult to understand the reading text and questions of the text and most of students think that learning English is difficult. These things can reduce students' interest in learning English. To solve the problem the writer used PBL. According to Delisle (1997:11), "problem-based learning requires students to make choices how and what they will learn. PBL students learn by working in teams and achieve success not through a teacher telling them they are right but through testing their solution and developing a presentation". Problem-Based Learning (PBL) is an instructional method that encourages the students to apply critical thinking, problem solving skill and content knowledge to real word problems and issues. The result of the study may become the references for other researchers to find out information about the improvement of students' reading comprehension achievement by using problem based learning (PBL) model.

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