

THE EFFECT OF CREATIVE PROBLEM SOLVING METHOD TOWARDS EFL STUDENTS' READING COMPREHENSION

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Abstract

Reading is very important when someone study about language specifically English..EFL Students must have good reading skill to understand the meaning in a text. Most of the tests faced by students at school need the comprehending skill. Moreover, Creative Problem Solving method can empower teams of teachers and students to work together to meet the challenges of educating a heterogeneous school population. The objective of this research was to find out whether there was significant effect of Creative Problem Solving method towards students' reading comprehension. This research was quantitative experimental research. The design was nonrandomized control group, pretest - posttest design. The samples were two classes in SMAN 11 Batam. It was used total sampling. Multiple choice of reading comprehension test was used as instrument of this research. The result showed that the t -observed is 3,98 and t -table is 2.00. It means that t -observed is higher than t -table, H_a is accepted and H_0 is rejected. The research found out that there was significant effect of Creative Problem Solving Method to students' reading comprehension. By using creative problem, student found the problem they found and think the best solution for their problem.

Keywords: *Creative Problem Solving, method, Reading Comprehension*

INTRODUCTION

English is very important language that use widely in many country as international language. It has commonly used as international communication and also in education. Nowadays, much information is provided in English. Based on that reason, it is very important for most of people to study English to be able to get information easily. Indonesia used English as foreign language. As an important language, English is taught formally in every grade of education in Indonesia. To be mastered in English there are four basic skills that should be learned by students, they are listening, speaking, reading, and writing. Reading is one of important skill that should be mastered by students to get the better result in learning process especially for English learner. As a foreign language, English reading comprehension is one problem even more complex for students, because it is a comprehending effort on foreign language studies.

Students must have good reading skill to understand the meaning in a text. Most of the test that faced by students in school needs the comprehending ability; it means that having good reading comprehension is really necessary for students. Students that have good reading

comprehension can answer the question and getting information in the text easily. There are some problems that make students difficult to get better reading comprehension skill. Students think that reading activity in class is not a fun activity and teaching students to read is not easy thing are one of those problems. Teacher should select the best method that makes the reading activity be make students easily to get information from text. The method that usually used in reading activity is by doing translating. Students are only able to transfer the text in English to the first language without getting the meaning of the text. Students found that reading activity is not a fun activity in class. The result, students cannot concentrate to the text they read, lose focus, and sometime talked to their friend in reading activity.

Based on the problem above, it is important to apply a method that can make students' reading comprehension become better. Many methods that can be used to teach reading comprehension, therefore, researcher wants to use Creative-Problem Solving (CPS) method to teach reading comprehension. According to Parnes (1985, 1988, 1992, 1997) in Giangreco, M.F (2000:297) the CPS process is one method for empowering teams of teachers and students to work together to meet the challenges of educating a heterogeneous school population. CPS method is one of method that can help to solve the case by finding the best solution together among the teacher and students. Students and teacher will create a sense of belonging that make the problem become easily to solve.

Reading comprehension is not only about being able to read a text correctly, but also about understanding what they read. It means that reading a text without understand the meaning of the text is useless, the main information that stated in the text is not transferred to reader. Reading is a fluent process of readers to combine information from a text and their own background knowledge to build meaning (Nunan, 2003:68 in Rosyita and Faridi, 2017:80). Furthermore, he explains the goal of reading is about comprehension, it means that the reader needs to comprehend the text that they read. According to Snow (2002:7) as quoted by Ranjbar and Akef (2015:55) reading comprehension is the process of simultaneously extracting and constructing meaning through interaction, and involvement with written language. This process involves three elements, they are: the reader, the text, and the activity or the purpose for reading. Readers try to understanding the text using their motivation, knowledge, cognitive abilities and experiences. Furthermore, Ranjbar and Akef (2015:55) state that Reading comprehension is

operationally defined as a task to improve what the readers are reading and then giving correct responses on questions about the text and grammatical points in the related book.

The students find the best answer of several options that they found from the problem they face in reading activity. Many techniques and tools for creating effective solutions to a problem are described in creativity techniques and problem solving. Ellamil, et al. (2012) as cited in Danesh and Nourdad (2017:234) define CPS as the process of directing thought into generating diversified ideas best adaptable to the situation. Houston (2007), states that The Creative Problem Solving method includes six steps as follows:

1. Constructing Opportunities (Choosing a problem). It means identifying problems, goals, challenges and opportunities currently student face. In reading, it is about reading comprehension. The teacher will explain about the topic that going to learn, and provide the text to the student. The student will read the text, after that teacher will guide the student to find the problem they face in reading process.
2. Exploring Data (Finding relevant information). It means telling or sharing what information they got from the topic. In group, student sharing information they found in the reading process. Student tries to getting meaning of the text they read, if there are parts of the text that is hard to understood by student, they should make a list in the text (underline it or noted it). In this step Student focus to finding the information from the text.
3. Framing Problems (Making a problem statement). It means producing problem statements that has been found before by students. Student states the part of the text that is difficult to be understand to teacher. Based on those problems, teacher turns the problem into questions. The questions will be solving together in the next step.
4. Generating Ideas (Thinking up solutions). It means teacher and students try to thinking up some solution to solve that problem. Teacher will give the opportunity to students giving their answers and reason to the answer from the question. Teacher tries to make student think creatively by giving several clues and example to answers the question. The answers listed in the whiteboard or elsewhere.
5. Developing Solutions (Deciding on the best solution). After several answer collected, Student and teacher are trying to find out which one is the best answer from the answers that listed by teacher.

6. Building Acceptance (Creating an action plan for implementing the solution). It means the solution is accepted, teacher and student make a conclusion to the problem that has been solved.

The problems that found in this process related to the indicator that assessed in reading comprehension. The student will find the best answers from several answers that given by students. Student should actively give their opinion in learning activity.

METHODOLOGY

The method of this research was quantitative experimental. According to Ary et al (2011:26) quantitative experimental research is a research which the researcher manipulates one or more independent variables, controls any other relevant variables, and observes the effect of the manipulations on the dependent variable. Sugiyono (2015:107) states that in experimental research there is a treatment. This research is used to find out the effect of a treatment to other variable in a condition. This research used nonrandomized control group, pretest - posttest design. According to Ary et al (2010:316) in nonrandomized control group, pretest - posttest design, subject are not randomly assigned to treatment group. Researcher gave a pretest to both classes, and administers program design to experimental class, and then gave a posttest to both classes.

This research was conducted at SMAN 11 Batam that is located in Pulau Buluh, Batam. There were 36 students at class A and 26 students at class B on eleventh grade of SMAN 11 Batam as the sample of the research. In this research the sample were two classes, there were class A as an experiment class and class B as a control class. For sampling technique the researcher used total sampling. This sampling technique is used if the number of population is relative small.

Researcher gave pretest to both classes, and administers program design to experimental class, and then gave a posttest to both classes. Pre-test is a test that given before the treatment. This test is used to know the data about reading comprehension of student before the treatment given. The instrument in pre-test is a valid and reliable instrument. After the Pre-test given, researcher gave treatment to experimental class. The treatment in this research was creative problem solving method to student reading comprehension. Researcher taught experimental class using CPS method. Post-test was given after the treatment. The function of this test is to get the data student's progress in reading after the treatment given. The question that given in

post-test is similar with question in pre-test. It is used to compare the student's reading comprehension before and after the treatment given.

FINDINGS AND DISCUSSION

The data of Pre-test class were taken from both experimental and Control class. The data could be seen from the table follow:

Table 1. Pre-test score of experimental and control class

Class	lowest score	highest score	Mean (X)	Standard Deviation	Variance
Experimental Class	36	64	49,42	7,31	53,39
Control Class	36	64	47,23	6,62	43,70

Based on the result of pre test in the experimental class, the data showed that the lowest score was 36, the highest score was 64, the mean was 49,42 , standard deviation score was 7,31, and variance was 53,39. Meanwhile, in the control class, the data above showed that the lowest score was 36, the highest score was 64, the mean was 47,23, standard deviation score was 6,61, and variance was 43,70. Based on the data above, the means score of pre-test experimental class was higher than control class.

Furthermore, the data of post-test was taken from both experimental and Control class. The data could be seen from the table follow:

Table 2. Post-test Score of Experimental and Control Class

CLASS	lowest score	highest score	Mean (X)	Standard Deviation	Variance
Experimental Class	60	88	74,68	7,16	51,24
Control Class	48	76	62,73	6,23	38,82

Based on the result of post test in the experimental class, the data showed that the lowest score was 60, the highest score was 88, the mean was 74,68, standard deviation score was 7,16, and variance was 51,24. Meanwhile, in control class, the result showed that the lowest score was 48, the highest score was 76, the mean was 62,73, standard deviation score was 6,23, and variance was 38,82. Based on the data above, the means score of post-test experimental class was higher than control class.

Testing Instrument

Validity of Test

To test the validity, the researcher used Correlation Product moment formula. The total number of respondent are 40 with significance level $\alpha = 5\%$, so the $r_{table} = 0.312$. If $r_{xy} > r_{table}$ so the data is valid and vice versa. It is obtained that from total 40 test items that given to the respondent, there are 25 items which were valid.

Reliability of Test

The researcher used Kuder-Richardson Formula or called as KR.20 formula to measure the reliability of instrument. Reliability test it tested to the 25 valid item of instrument. If $r_{11} > r_{table}$ so the data is reliable, and if $r_{11} < r_{table}$ so the data is not reliable. Based on the calculation with 40 respondents and 25 questions, the result of reliable test show the r_{11} is 0.89. With the significant index 5% or 0.05, so r_{table} is 0.312, the result showed $r_{11} > r_{table}$, $0.89 > 0.312$. It means that the instrument test is reliable. So there were 25 items of reading comprehension test that distributed as the instrumentation of this research.

Normality Test

Normality test was analyzed toward both of data group, experiment and control class. The result of the reading comprehension test is analyzed for its normality to show the data from both classes is in normal distribution or not. From the the comparation of $\chi^2_{observed}$ with χ^2_{table} ($dk=4$), significant level 0,05), the researcher found that the data was normal, because $\chi^2_{observed} < \chi^2_{table}$.

Table 3. Summary of Normality Test

Variable	Class	$\chi^2_{observed}$	χ^2_{table}	Conclusion
Pre-test	Experiment	1,87	9,48	Normal
	Control	2,55	9,48	Normal

Post-test	Experiment	8,81	9,48	Normal
	Control	5,46	9,48	Normal

Homogeneity Test

The researcher used variance test (F-test) to know the homogeneity of the data. The criteria of homogeneity test is if the $f_{\text{observed}} > f_{\text{table}}$, so the instrument, it showed that the class were not homogeneous and vice versa.

On significant 5% or 0,05, with df numenator $(nb-1) = 34-1$ and df denominator $(nk-1) = 26-1$, it was found the $F_{\text{table}} = 1,902$. Based on the calculation, the researcher found out $f_{\text{observed}} < f_{\text{table}}$, it means the variance of pre-test and post-test in experimental class and control class were homogenous.

Table 4. Summary of Homogeneity Test

No	Variable	F_{observed}	F_{table}	Note
1	Pre-test	1,221	1,902	Homogeneous
2	Post-test	1,319	1,902	Homogeneous

Hypotheses Testing

The researcher used hypothesis testing to prove whether there was significant effect of Creative problem solving method. Based on the calculation by using t-test formula, it was found that the value of t_{observed} was **3,98**, and the t_{table} on significant 5% or 0,05, with $dk = (n1 + n2) - 2 = 58$, was **2,002**. It shows that t_{observed} is bigger than t_{table} , $t_{\text{observed}} (3,98) > t_{\text{table}} (2,002)$. Based on the result, it can be concluded that the alternative hypothesis accepted and there found difference of student means score between the experiment class and control class. It means that the experimental class that was given the treatment by using Creative problem solving (CPS) method gave significant effect to student's reading comprehension.

Based on the research that has been done by the researcher, it was known that Creative problem solving (CPS) method gave significant effect to student reading comprehension in experimental class. It showed by statistical analysis of the hypothesis testing, which shows the t_{observed} is higher than t_{table} . Mean score of experimental class that taught using Creative problem solving was 74,68, and the mean score of control class that taught using group discussion was 62,73. It showed the student's mean score of reading comprehension in experimental class was better than student's mean score of reading comprehension at control class.

Creative problem solving is one of methods that can improve students' reading comprehension. It is because the student can figure out what problem they found in reading process, and try to solve the problem by using creative idea and solution from themselves. The students were also more active in learning process to get the meaning of the text they read. This method also made students easily to give their opinion about the problem that they found in process of reading. The process of learning also becomes more fun, because every student was trying to give their opinion. By understand the problem they found in reading process, and finding the solution; student can be easy to answer the questions that given to them. It is showed by the result of test that higher than the method that taught in other class.

From the research that has been done by researcher, the result of data analysis showed that Creative problem solving can make student easier to comprehend the text they read, enjoy the learning process, and active giving their opinion to problem they found. It can improve their reading comprehension skill, and also make student easy to answer the reading comprehension test.

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