THE INFLUENCE OF PROBLEM-BASED LEARNING MODEL ON LEARNING IPS

Musdiani
STKIP Bina Bangsa Getsempena Banda Aceh, Indonesia
Contributor Email: musdiani@stkipgetsempena.ac.id

Received: Jun 10, 2017  Accepted: Sep 23, 2017  Published: May 28, 2018

Abstract

This research entitled: "The Influence of Problem-Based Learning Model on IPS (Social Education Science) learning outcomes in appreciating the history materials of grade fifth students at SD Negeri 46 Banda Aceh". The aim of this study is to determine the effect and student learning outcomes on appreciating the material of historical relics towards learning outcomes. This study is quantitative, while the method of the research is experimental. The population in this study were the students of class V-A and class V-B that consisted 60 students. Class V-A is as an experimental and class V-B as conventional learning model. The test was used to collect the data. It was analyzed by using t-test formula. The results of the data analysis showed that the students of the experimental class got the 80.5 score, while the students in the control class were 74.5 score. It shows that students in the experimental class have better learning outcomes than control class students. The t-count of analysis shown that the value of t-arithmetic = 2.15. While the t-table value = 2.00. This proves the value t-arithmetic ≥ t-table. It can be concluded that there is a significant influence between the influences of problem-based learning model with the results of learning on appreciating the material of the historical relics for class fifth students at SD Negeri 46 Banda Aceh.

Keywords: Problem Based Learning Model, Learning Outcomes, Relics History
A. Introduction

The problem of quality education becomes one of the most crucial problems faced by developing countries, including Indonesia, which includes the problem of student achievement, effectiveness, efficiency, and educational relevance. The quality of education in Indonesia is still low, and still under the neighboring countries such as Singapore and Malaysia.

To improve the quality of education, the government has tried to take remedial measures such as improving teacher quality, curriculum, and procurement of educational facilities and infrastructure. Unfortunately, these efforts are still general and global; it has not been yet addressing the problems faced in the classroom such as seeking to overcome student learning difficulties in the classroom. It should be realized that as well as any curriculum designed, as complete as any facilities and infrastructure provided, but if it is not implemented properly by teachers and students in the classroom, certainly then learning will not get maximum results.

Based on the writer's analysis in SD Negeri 46 Banda Aceh, the cause of less learning not only comes from students but also teachers. There are some problems faced by the students such as: (1) students tend to learn individually and competitively which is consequently there would be a competition in high-ability and low ability students. (2) The student assumes that the teacher is the only center and learning resource, but in fact if there is any problem or unclear matter, the student is afraid to ask the teacher and prefer to ask her friend more intimate.

Looking at the phenomenon, it is necessary to apply a learning system that involves the role of students actively in teaching and learning activities in order to improve learning outcomes in each level of education. One of the learning models involving active student roles is the Problem-Based Learning model. The Problem-Based Learning Model is a learning model that exposes the student to the problems of daily life for learning by raising the problem. It becomes a model to help students develop thinking skills, problem solving, intellectual skills, and become autonomous and independent learners.
Based on the discussion above, this study would be proposed relating to the Influence of Problem Based Learning Model on Learning Outcomes in the Material Respect Heritage Historical Student Class V SD Negeri 46 Banda Aceh".

Based on the above description of the background, there are two formulated research problems offered namely:

1. How does the effect of Problem Based Learning model on learning outcomes on the material appreciate the history of class V SD Negeri 46 Banda Aceh?
2. How is the completeness of student learning outcomes on the material appreciate the relics of history through Problem-Based Learning model of students of grade V SD Negeri 46 Banda Aceh?

B. Method

This study uses a quantitative approach which is a systematic, well-planned, and clearly structured study from the beginning to the design of his research and demands the use of numbers, from data collection, interpretation of the data, and the appearance of the result, (Arikunto, 2006: 192). The experimental research used is the pseudo experiments that are the kinds of experiments that are considered to be good because it has fulfilled the requirements due to the existence of other groups that are not known experiment and get the observation, (Arikunto, 2006: 86) by using the learning model of Problem Based Learning. In the experimental class students are taught the material of appreciating historical relics through the model of Problem Based Learning whereas in the control class is taught by using conventional methods.

The technique of collecting data in this research is by using test. The multiple-choice test consists of 20 multiple choice questions. The tests are given in the experimental and control classes after being taught about the material of appreciating historical relics.

1. Technique of Data Analysis

The statistical data processing required in connection with the use of t-test is:
Note:

t : The value of t-test
X1: The average value in the experiment class
X2: The average value in the control class
S_2: Standard deviation in experiment class
n1: Number of students in experimental class
n2: Number of students in the control class

The criteria of hypothesis testing will be done, at a significant level $\alpha = 0.05$ with degrees of freedom (dk = n-2) (Sudjana, 2005: 231).

C. Research Finding

Data collection is done by giving a test consisting of 20 multiple choice questions. At the time the test is given, the students complete the test individually. The teacher instructs the students to read the questions carefully and find the answers carefully. Strict supervision is also done so that students can not cooperate with one another. This is done so that the results obtained really pure test results of individual students' abilities. Based on the results of tests that have been given, the value of student ability increased higher and almost all students can achieve the value of Minimum Exhaustiveness Criteria (KKM) of 65. The results obtained can be seen in the following table:

**Table 4.1 The score of test in experimental class**

<table>
<thead>
<tr>
<th>No</th>
<th>Code</th>
<th>Pre Test</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SNU</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td>2</td>
<td>RW</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td>3</td>
<td>NF</td>
<td>60</td>
<td>65</td>
</tr>
</tbody>
</table>
Based on the table above, the value of pre-test of students in the experimental class showed that the lowest value of 60 while the highest
value of 90. Post test results indicate that the lowest student score is 65 while the highest value is 100.

The data collection in the control class is done by giving the test about the material of the function and the plant part consisting of 20 multiple choice questions. However, students in control classes are not taught by using problem-based learning models, but using lecture methods. Based on the results of tests, that has been given, the value of student ability increased better. However, improvements in student learning outcomes in control classes are not as well as the improvements achieved by students in the experimental class. This is because the use of different learning models. So the results achieved also have differences. Students in the control class are taught by using lecture methods. In this case, the teacher becomes the main source in the learning process that students are not actively involved. More students hear and pay attention to teacher explanations. The results obtained can be seen in the following table.

**Tabel 4.2 The score of test in control class**

<table>
<thead>
<tr>
<th>No</th>
<th>Nama Siswa</th>
<th>Nilai Pre Test</th>
<th>Nilai Post Tes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MZ</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td>2</td>
<td>MR</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td>3</td>
<td>RR</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td>4</td>
<td>KI</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td>5</td>
<td>MM</td>
<td>65</td>
<td>70</td>
</tr>
<tr>
<td>6</td>
<td>AF</td>
<td>65</td>
<td>70</td>
</tr>
<tr>
<td>7</td>
<td>LS</td>
<td>65</td>
<td>70</td>
</tr>
<tr>
<td>8</td>
<td>MF</td>
<td>65</td>
<td>70</td>
</tr>
<tr>
<td>9</td>
<td>JN</td>
<td>70</td>
<td>75</td>
</tr>
<tr>
<td>10</td>
<td>NA</td>
<td>70</td>
<td>75</td>
</tr>
<tr>
<td>11</td>
<td>RF</td>
<td>70</td>
<td>75</td>
</tr>
<tr>
<td>12</td>
<td>YD</td>
<td>70</td>
<td>75</td>
</tr>
<tr>
<td>13</td>
<td>ZH</td>
<td>70</td>
<td>80</td>
</tr>
<tr>
<td>14</td>
<td>LD</td>
<td>70</td>
<td>80</td>
</tr>
</tbody>
</table>
D. Discussion

Discussion of the results of this study is based on the results of data analysis. The mean grade of the students in the experimental class was higher (80.5) than the average grade in the control class taught by using the lecture method (74.5). The success of students in the experimental class is due to the use of problem-based learning model. In this approach, students understand the material taught by discussing problem solving in learning. The learning process with this problem-based learning model makes students remember the material for longer period of time; this is because the students are more active and independent in understanding the material during the learning process. Therefore, learning by using this model can improve student learning outcomes.
The indicator in determining the application of the PBI model in SD 46 Banda Aceh is the achievement of student learning outcomes. Based on the learning achievement, it can be stated that the students have done the learning through problem based learning model as expected. In this case, the learning outcomes are in accordance with the expected in the value of KKM because in this learning model students have been able to learn in different situations, so that students are more courageous to express opinions seek solutions over that problem that they faced.

Based on the results of data analysis has been done, the value of t-test higher than t-table which is t-test which is 2, 15 while t-table is 2, 00. It shows that there is a significant influence of Problem-Based Learning model to the students' ability in about learning the history

**E. Conclusion**

Based on the discussion that has been explained previously, the conclusions are as follows:

1) The results showed that the average score of students in the experimental class was higher than the average score of the students in the control class. Students in the experimental class score an average of 80.5, while the students in the control class get a value of 74.5. This shows that students in the experimental class have better learning outcomes than students in the control class.

2) t-count analysis shows that the value of t-count = 2.15 while the value of t-table = 2,00. It shows that t-test ≥ t-table that means there is a significant influence of Problem-Based Learning model. The students are more easily to understand and find the important things in the subject given, by conducting joint discussions and inter-group competencies the score obtained by students increased more than before the use of learning models.

**Bibliography**


