Effect of Problem Based Learning Model and Social Skills on Learning Outcomes at Integrated Islamic Elementary School NU Tanjung Morawa

Nurhalimah Siahaan\(^{1}\), Deny Setiawan\(^{2}\), Asih Menanti\(^{3}\)

\(^{1,2,3}\)Universitas Negeri Medan, Indonesia
*nurhalimasiahaan09@gmail.com

Abstract. This study aims to: (1) analyze differences in student learning outcomes in problem-based learning groups with direct learning groups, (2) analyze student learning outcomes of high social skills groups with low social skills student groups, and (3) know the interaction of learning models with skills social impact on student learning outcomes. The study was conducted at SD Islam Terintegrasi NU Tanjung Morawa and the Tahfizhil Quran Islamic Center of Medan. The research method uses 2 x 2 factorial Quasi Experiment and to analyze the data using Two Way ANOVA. The results indicate (1). Student learning outcomes of problem-based learning groups are higher students of direct learning groups. (2) Student learning outcomes in high social skills groups are higher than low social skills groups. 3) There are interactions model of learning and social skills toward student learning outcomes in Civics Education subjects

Keywords: problem based learning, social skills, learning outcomes

1. Introduction

Schools as education providers certainly cannot be separated from learning that wants every student to be capable to foster student enthusiasm for learning with the right strategy when delivering subject matter. This strategy can later be done by actively involving students in the learning process, in this way students will further strengthen their understanding of the concept of the material taught by the teacher [1]. Of course, to achieve this must begin with a teacher who must have the ability to master learning strategies so that learning objectives can be achieved. One of these goals is to improve student learning outcomes in class. The teacher is one of the supporting factors in improving student learning outcomes. Many things that must be considered by a teacher on the learning process in the classroom that is they must pay attention to students, of course, the condition of students is very varied starting from different economic, social, biological and intelligence backgrounds so that the teacher can choose learning methods that are in line with the characteristics of various students. Not only the characteristics of students, but teachers also must pay attention to the atmosphere in the teaching and learning process, of course, they must create a different atmosphere from day to day [2]. This is done so that students do not feel tired and monotonous with the teaching and learning activities that they follow. But in reality, there are still many teachers who do not pay attention to this, often encountered many teachers who become the main source in learning with the same atmosphere, students are not involved when learning takes place. It causes learning to be less effective and efficient. A teacher should be a liberator for the locking of students' self-abilities.
A teacher must also be able to develop the self-potential of a student, increase independence, enthusiasm for learning, and its outcomes. If the teacher is able to do it, then it is possible to improve student learning outcomes in class. Moreover, in view of the students especially those subjects Civics always considered boring because it is faced with a lecture which was followed by awarding memorization on any learning process. However, it is very boring for students to follow the learning.

Based on observations and interviews with one of the teachers at the Integrated Islamic Elementary School NU Tanjung Morawa, the learning process is still dominated by the teacher as a learning resource and the learning approach still tends to use the method approach lecture. Every lesson in a student's class is always placed as a loyal listener when conveying the concept of learning material. Students feel bored by just sitting, silent, and listening as if there is no time to think and create as effectively as possible.

In implementing the learning activities, the teacher can implement a learning strategy that is interesting and suitable for students' learning needs. It certainly can make students more motivated to follow each teaching and learning process that does not rule out the possibility of learning outcomes will increase.

The problem-based learning model offers to learn based on the problem so that students get knowledge and are proficient in solving group work. This is where students can improve their enthusiasm for learning in the classroom because the learning process is student-centered so that they can obtain learning outcomes and improve student social skills. Social skills are a necessity that students need to have as provisions for the continuation of life and are useful in daily life in the family and surrounding environment, social skills are part of life skills. It indicates that the importance of students' social skills in class so that if students have good social skills, it does not rule out the possibility of student learning outcomes will increase because every day that is done in the classroom does not just sit and listen to be more active by having good social relations. With classmates who are able to make students actively participate in their study groups.

This research is considered important to be carried out because in this school no teacher has ever conducted a similar study and the teacher has not used the problem-based learning model in the teaching and learning process, and based on the results of the research described above makes this research have strong reasons to be carried out in schools to improve student learning outcomes social skills are a must that students need to have as a provision for life continuity and benefits in everyday life in the family and the surrounding environment, social skills are part of life skills. It shows that the importance of social skills of students in the class so that if they have good social skills, do not rule out the possibility of student learning outcomes will increase because every day that is done in class does not just sit and listen, first actively by having good social relationships with friends classmates who are able to make students actively participate in their study groups.

### Problem-Based Learning Model

The problem-based learning model is a learning model that can train and develop the ability to solve problems oriented to students' from the actual lives of students. According to Ngalimun [1] that problem based learning is an innovative model that focuses on active learning for students. Students are actively involved to solve problems using scientific procedures and rules.

To implement problem-based learning, teachers need to choose learning materials that have problems and can be solved. These problems can be taken from textbooks or other sources, for example, from events that occur in the surrounding environment, events in the
family, or social events. Problem-based learning is very well-used in learning because there will be meaningful learning. Students who learn to solve problems, they will need to apply the knowledge they have. The problem-based learning model is a learning model characterized by problems that encourage students to be capable and actively to find solutions to problems.

**Definition Social Skills**

The word of social skills comes from two words, namely from the words skilled and social, skilled therein means the meaning of a learning process, the word social means to interact with others. Social skills aim to be capable to learn and interact with others, from unskilled to skilled and able to interact in formal and informal relationships.

Thalib [2] revealed that social skills are the ability to overcome problems that arise as a result of interactions with the environment and can adjust to the rules and norms that apply. Social skills include the ability to communicate, build relationships with others, respect yourself and others, listen to opinions or complaints from others, give or receive feedback, give and take criticism, act according to norms and rules, and so forth.

Goleman [3] states that social skills can produce students more responsible, more assertive, more popular and sociable, more social and helpful, more understanding of others, more considerate, attentive, smarter in implementing strategies who care more about the environment to solve interpersonal problems, are more harmonious, more democratic and more skilled at solving problems.

Social skills are skills that must be possessed by humans as social creatures to adapt to their environment, can overcome problems that arise as a result of interactions with the environment. And can communicate effectively with others [4]. Teach various skills to children. One of these skills is social skills related to efficient learning and various learning techniques according to the type of learning. In this case, the role of parents is to maintain the child’s social skills and can be developed continuously in accordance with the stage of development.

2. **Research Method**

The implementation of this research is at Class IV of the Integrated Islamic Elementary School of NU T.Morawa and Tahfizhil Qur'an Islamic Center. It will be carried out in the Odd Semester 2019/2020 school year, which begins in October 2019. The population in this study is Class IV of Integrated Islamic Elementary students of NU T.Morawa and Tahfizhil Qur'an Islamic Center. This research is a quasi-experimental study. The test given before treatment (pre-test) and the treatment given (post-test) and the difference between score of pre-test and post-test assumed as treatment effect. The research design 2 x 2 factorial designs with two-way Anova as shown in Table 2.1.

<table>
<thead>
<tr>
<th>Table 2.1 Factorial Design of The Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Model (A)</td>
</tr>
<tr>
<td>Social Skills (B)</td>
</tr>
<tr>
<td>High (B1)</td>
</tr>
</tbody>
</table>
To test the Anova two-way path using SPSS 20.0 for Windows, the analysis then compares the significant value to be obtained, if 0.05, it might have an effect. In addition, the null hypothesis \( H_0 \) is rejected when giving a \( F_{\text{count}} > f_{\text{table}} \) of at least a 5\% value [5,6].

The hypotheses in this study are: First, \( H_0 \): The students who are taught with problem-based learning model have a lower learning outcome of Civics than their learning outcomes when taught by using the direct instruction model in Class IV of Integrated Islamic Elementary School NU T. Morawa. \( H_a \): The students who are taught by problem-based learning model are higher of learning outcomes than their learning outcomes taught by direct instruction. The second hypothesis \( H_0 \): Students with high social skills have a lower learning outcome than their who have low social skills. \( H_a \): Students with high social skill have a higher learning outcome than their who have low social skills. Third Hypothesis \( H_0 \): There is no interaction learning models and social skills toward learning outcomes of Civic Education subject in Class IV. \( H_a \): There is an interaction between learning models and social skills toward the learning outcomes of Civic Education subject students in Class IV of Integrated Islamic Elementary School NU T. Morawa.

3. Result and Discussion

This study uses two classes, namely the control class in Class IV of Integrated Islamic Elementary School Tahfizhil Quran Islamic Center Medan and the experimental classes in Class IV of Integrated Islamic Elementary School NU T. Morawa. The results obtained in this study, which contained scores of research conducted before the implementation (pre-test) and scores of learning outcomes after being given training (post-test), provided data on the level of social skills of each student before being given either training in the control class or the experimental class, and student learning outcomes are based on different social skills after being treated. This study uses data analysis techniques in the form of descriptive analysis and inferential statistics in the form of a two-way ANOVA parametric test.

After the pre-test and post-test data are collected, the next step taken is the analysis phase. The initial analysis conducted was a comparison of learning outcomes both in the pre-test and post-test in the experimental class and also in the control class. The comparison of data is presented in Figure 3.1 in the bar chart:
Based on Figure 3.1 above, it can be stated that there are differences in learning outcomes, especially after the treatment model is given, wherein the experimental class using a problem-based learning model, student outcomes are higher than student learning outcomes using direct instruction learning model in the control class [7]. If the increase in learning outcomes calculated between pre-test and post-test learning outcomes is in accordance with Figure 3.1, the average value in the experimental class increased by 15 points, while the value in the control class increased by 10 points. Thus it can be stated that the increase in Civics learning outcomes taught by the problem-based learning model is higher than Civics learning outcomes taught by the direct instruction learning model.

The next analysis that is carried out is a comparison of social skills possessed by students both pre-test and post-test in the experimental class and in the control class. The comparison of data is presented in Figure 3.2 in the following bar diagram:

![Diagram of Questionnaire Social Skills](image)

Based on Figure 3.2 above, it can be seen the comparison of social skills possessed by students in the pre-test and post-test in the experimental class and the control class. Figure 3.2 illustrates that at the pre-test in the experimental class, the average acquisition of students' social skills was 59 whereas in the control class the average acquisition of students' social skills was 54. Whereas post-tests meant that social skills were obtained after the use of the learning model, in the experimental class using problem-based learning models obtained an average of 72. While in the control class using direct learning models obtained an average of 69. The description explained based on Figure 3.2 above, it can be stated that there are differences in the social skills of students both before and after being given care in the process learning. Where in this study, students' social skills were better by using a problem-based learning model than students' social skills by using a direct instruction learning model.

In this study, the hypothesis test used was a parametric test in the form of two-way Anova. The Table 1 below serves to answer the hypotheses described in the previous chapter. First, based on the two-way ANOVA test in Table 1, the significance value obtained in the learning model section is 0.008, so the hypothesis testing results reject Ho and accept Ha with the provisions of significance (0.05). Based on the acquisition of the significance value results, it can be stated that the learning outcomes of Civic Education students taught using the
problem-based learning model are higher than the learning outcomes of students Civics who are taught using direct instruction learning model. Its test results can be seen in the following table:

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>3552.156*</td>
<td>10.713</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>224333.981</td>
<td>1957.973</td>
<td>.000</td>
</tr>
<tr>
<td>Learning Model</td>
<td>854.387</td>
<td>7.457</td>
<td>.008</td>
</tr>
<tr>
<td>Skills_sos</td>
<td>972.557</td>
<td>4.488</td>
<td>.005</td>
</tr>
<tr>
<td>Learning Model * Skills_sos</td>
<td>486.385</td>
<td>4.245</td>
<td>.044</td>
</tr>
<tr>
<td>Error</td>
<td>6416.177</td>
<td>114.575</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>331300.000</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

Based on the average value obtained by the average value in the experimental class is 80, while in the control class the average value is 71. Thus it can be concluded that the learning outcomes of Civic Education students taught by problem-based learning models are higher than their learning outcomes when taught by using the direct instruction learning model in Class IV of Integrated Islamic Elementary School NU T. Morawa.

Second, based on the ANOVA test two-way in Table 3.1, the significance value in the social skills section is 0.005. Because of the acquisition of the significance of 0.005 results, which means less than 0.05 so the results of hypothesis testing reject Ho and accept Ha. Based on the acquisition of the significance value result, it can be stated that the learning outcomes of Civic Education students who are taught using high social skills are higher than their learning outcomes when taught using the direct instruction learning model. Based on the average value obtained by the value of social skills in the experimental class is 71, while the average value of social skills in the control class is 65. By this hypothesis, it can be concluded that the learning outcomes of Civic Education students who have a high value of social skills are higher than their learning outcomes who have low social skills in Class IV of the Integrated Islamic Elementary School NU T. Morawa.

Third, based on the two-way ANOVA test in Table 3.1, the significance value in the learning model x social skills section is 0.044. Because the acquisition of significant results of 0.044, which means less than 0.05 so the results of hypothesis testing reject Ho and accept Ha. Based on the acquisition of significance value results, it can be stated that there is an interaction between learning models and social skills on the learning outcomes of students Civics in Class IV of the Integrated Islamic Elementary School NU T. Morawa. This is in line with some of the theories and results of previous studies [5,7,8].

4. Conclusion

The conclusions obtained from this study are:
1) The learning outcomes of Civic Education students taught using the problem-based learning models are higher than the learning outcomes of students Civics who are taught using the direct instruction learning model. This statement can be proven by the two-way ANOVA test where the significance value obtained in the learning model section is 0.008,
which means that the significance value of the learning model is smaller than the significance value (0.05).

2) The learning outcomes of Civic Education students who are taught using high social skills are higher than the learning outcomes of Civic Education students who are taught using the direct instruction learning model. This conclusion is proven based on the two-ANOVA test way where the significance value obtained on social skills is 0.005, which means that the significance value of social skills is smaller than the significance value (0.05).

3) There is an interaction between learning models and social skills on student learning outcomes in Class IV of the Integrated Islamic Elementary School NU T.Morawa. This conclusion is proven based on the two-way ANOVA test where the significance value obtained in the learning model with social skills is 0.044, which means that the significance value is less than 0.05.

5. Reference