The Effect of Project Based Learning Models and Learning Motivation on Civics Learning Results in 4th Grade Primary School 106163 Percut Sei Tuan

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I. Introduction

The government has been trying to improve the quality of education by completing the facilities needed by schools to support the learning process (Yusrizal, S. Tanjung and I. Hajar, 2019). However, the facts in the field have not shown satisfactory results, many of the teachers are reluctant to use these facilities for reasons that are complicated in their use. Education in Indonesia is expected to prepare students to become citizens who have a strong and consistent commitment to defending the Unitary State of the Republic of Indonesia. Quality education will produce humans who have superior and independent abilities. Efforts to improve the quality and quality of education are continuously made in order to produce a reliable society both in terms of knowledge and attitudes in accordance with the objectives of Citizenship Education. This has actually been formulated in Citizenship Education (Civics) learning at every school level from elementary school to college.

Citizenship Education (Civics) has a very important role in ensuring the development and survival of an Indonesian state government and advancing general welfare, educating the nation's life, demanding the implementation and development of education that can guarantee

Abstract

This study aims to: (1) Determine the differences in student PPKn learning outcomes taught with a project-based learning model compared to students taught using a direct learning model; (2) Knowing the differences in the learning outcomes of students who have high learning motivation compared to students who have low learning motivation; (3) Knowing the interaction between the project based learning model and learning motivation in influencing the learning outcomes of students' PPKn at Primary School 106163 Percut Sei Tuan. The population in this study were the fourth grade students at Primary School 106163 Percut Sei Tuan, totaling 54 people. 4th Grade a as many as 27 students and 4th Grade b as many as 27 students. Collecting data in this study through a questionnaire on learning motivation and learning outcomes test instruments PPKn. Hypothesis testing is done by using the Two Way Anova test. The results showed that: (1) The PPKn learning outcomes of students who were taught with the project based learning model were higher than the PPKn learning outcomes of students taught using the direct learning model ($F_{count} = 23.476$ and the sig. $0.000 > 0.05$); (2) Student PPKn learning outcomes who have high learning motivation are higher than those with PPKn learning outcomes of students who have low learning motivation ($F_{count} = 7.673$ and sig. $0.008 > 0.05$); (3) There is an interaction between the project based learning model and learning motivation in influencing students' PPKn learning outcomes ($F_{count} = 13.003$ and sig. $0.001 > 0.05$).

Keywords

project based learning model; learning motivation; learning outcomes
the development and life of the Indonesian nation. In learning Citizenship Education, there are two things that need the attention of the teacher, namely to equip children with morals through the values contained in the five principles of the state, namely Pancasila principles and to equip students with material related to school academics.

As a subject in the school curriculum, Civics has a mission that must be carried out, among the missions that are carried out is as basic education to form and educate citizens to be able to think critically and creatively, criticize every development and movement that occurs especially in the world of education in order to further develop the mindset of the nation's children and citizens. However, in reality in the field there are many weaknesses found in the application of Citizenship Education in schools, the most highlighted factor is the level of the teacher's ability to design interesting learning for students. The same thing is expressed by Wibowo and Wahono (2017) who state that the weaknesses of Citizenship Education in Indonesia are on the side of teaching which is monotonous, not innovative (overload and overlapping content) and focuses more on cognitive, while affective and psychomotor are eliminated and not included. on the national exam.

The teacher is a very important factor in determining the success of the learning process, therefore the teacher must be able to increase student learning motivation so that students play an active role in the learning process so that they are expected to achieve good quality education. The level of learning outcomes obtained by students is influenced by the ability of teachers to manage learning evenly according to the educational background of the teacher. The achievement of the teaching and learning process is very dependent on the role of the teacher in learning activities in the classroom. One of the internal factors that greatly influence the student learning process is learning motivation. Students will be successful in learning if there is a desire for themselves to learn. As one of the duties of the teacher is to increase student motivation to learn the material being taught. In addition, with the increase in student learning motivation, it affects learning outcomes where these changes mean that there is an increase and better development than before.

Based on the data obtained from the Administration office of SD Negeri 106163 Percut Sei Tuan, it can be seen that the average UAS scores of grade IV students for Civics subjects in the last three years are as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>School year</th>
<th>Semester</th>
<th>KKM</th>
<th>Lowest Score</th>
<th>Highest Score</th>
<th>Rata-rata</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2016/2017</td>
<td>Odd</td>
<td>71</td>
<td>40</td>
<td>90</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Even</td>
<td>71</td>
<td>43</td>
<td>85</td>
<td>66</td>
</tr>
<tr>
<td>2</td>
<td>2017/2018</td>
<td>Odd</td>
<td>71</td>
<td>47</td>
<td>88</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Even</td>
<td>71</td>
<td>56</td>
<td>85</td>
<td>68</td>
</tr>
<tr>
<td>3</td>
<td>2018/2019</td>
<td>Odd</td>
<td>71</td>
<td>38</td>
<td>92</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Even</td>
<td>71</td>
<td>36</td>
<td>83</td>
<td>70</td>
</tr>
</tbody>
</table>

Source: Data on 4th Grade Students of Primary School 106163 Percut Sei Tuan
Based on the results of these observations and interviews, it can be concluded that in these schools it is necessary to apply a learning model that is innovative and can stimulate student learning motivation so that it can improve student learning outcomes. Therefore, choosing the right learning model is one of the supporting factors for achieving maximum learning outcomes, because using the right learning model will make the learning atmosphere interesting and not boring. For this reason, it is necessary to apply a learning model in increasing motivation and student learning outcomes, one of which is by using the Project Based Learning model. Surya (2018) said the use of the Project Based Learning model can improve student learning outcomes and creativity. Furthermore Sari (2015) in his research revealed that the use of the Project Based Learning model can improve student learning outcomes and speaking skills.

The Project Based Learning learning model is one of the learning models that is thought to increase the motivation and learning outcomes of Civics because through this learning model students are required to solve problems related to the diversity of various jobs in Indonesia and their respective functions, in order to instill an attitude of respect to people whose jobs are not even decent and can respect each difference more by not dividing the rich and the poor. Through this learning, the teacher also directs students to determine what they want when they grow up, what they will be like. This Project Based Learning model requires students to be more active and involve students in the process of learning activities by producing works in the form of writing, video art or presentations that have been discussed by their group friends, which previously they had to formulate, design, detail, carry out and evaluate the results of the "Various Works" material.

II. Review of Literature

2.1 The Nature of PPKn Education

According to the 2013 Curriculum it is said that PPKn learning is a subject related to self-formation that is diverse in terms of religion, socio-cultural, language, age and ethnicity to become critical, creative and character citizens in accordance with the foundations of the Indonesian state, namely Pancasila and the Constitution. 1945 in which Pancasila is the basis of the state and state ideology. In learning Citizenship education is a vehicle for developing and preserving noble and moral values rooted in the Indonesian culture which are expected to be manifested in the form of behavior in students' daily lives, both as individuals and as members of society.

As a subject in the school curriculum, PPKn has a mission that must be carried out. Among the missions that must be carried out are basic education to educate citizens to be able to think critically and creatively, criticize, develop thoughts. For this reason, students need to have the right learning abilities, express and express opinions, recognize and analyze problems that arise in their environment in order to achieve the expected behavior.

With a situation like this the teacher must be able to take an action to get around what is happening in class. Teachers must be able to change strategies so that the ability to improve students' abilities in the learning process. One way that can be taken in relation to the innovation of teacher teaching assignments is that teachers should have the ability to develop teaching methods. The teaching method is defined as a method or technique used by teachers in presenting teaching materials to students to achieve teaching goals. Especially in this case is a method to support the teaching and learning process of Citizenship Education (PPKn).

The choice of teaching method also needs to be considered because not all materials can be taught with only one teaching method. The teacher should be able to choose a teaching
method that is considered in accordance with the material to be taught. This is intended so that teaching, especially in the subject of Citizenship Education (PPKn), can take place effectively, efficiently, and not boring.

2.2 Project Based Learning Model

Project Based Learning is a learning method that uses problems as a first step in collecting and integrating new knowledge based on experiences in real activities. In addition, by using Project Based Learning students can develop themselves in investigating a problem with their group colleagues so that their ability to do research will also develop. Abdullah (2017: 173) says that the learning process through project based learning allows teachers to "learn from students" and "learn with students". So the project based learning model directs the student centered learning process. There are several characteristics about the project based learning model according to Abdullah (2017: 173), namely focus on one problem, the existence of student involvement in project creation, the product must be realistic and planned in advance by students and their groups.

Based on this opinion, it is clear that using the project based learning model is very beneficial in achieving maximum learning outcomes for students because this learning model is carried out to deepen the knowledge and skills obtained through discussions with a group of friends by producing a project in the form of a work related to the teaching material or competence being studied. The characteristics of the project based learning model are presented as follows:

![Figure 1. Characteristics of Project Based Learning Model (Abdullah 2017: 174)](image)

The principles of project-based learning are also based on constructive learning theory. Constructive learning has to do with cultivating students' efforts to construct complex and rich representations of memory, which demonstrate a strong degree of relationship between semantic, episodic, and action knowledge.

Project-based learning model is one of the learning models that can increase student learning motivation because this learning model can maximize the activities of students in learning. Students are invited to be more responsible in the learning process. According to Fathurohman Muhammad (2015: 124), he reviews the steps for project-based learning, namely:
2.3 **Learning Motivation**

Motivation already exists when someone does an activity, but they may not be aware of it. According to Sofyan (2012: 67) "Motivation is a need that exists in humans which will lead to motives, and motives create an urge to move to fulfill it which is called encouragement". As a result, drives (activities / businesses) arise to achieve these goals. This can also be described as follows:

\[ \text{Needs} \rightarrow \text{Motive} \rightarrow \text{Drives} \rightarrow \text{Goal} \]

According to Santrock (2008: 510) Motivation is a process that provides enthusiasm, direction, and behavior persistence. Behavior that is motivated is behavior that is full of energy, purposeful and enduring. Motivation provides extraordinary enthusiasm and encouragement for someone to behave and can provide direction in learning. Without motivation, a person cannot do activities. Motivation has a very important function in an activity, it will affect the strength of the activity, but motivation is also influenced by goals. The higher and the meaning of a goal, the greater the motivation, the stronger the activity will be.

According to Uno (2011: 1) says that motivation is a basic impetus that moves individuals to behave. Motivation occurs because of a change in energy and drive that exists in a person to achieve a goal with his activities or behavior. Many experts have put forward the notion of motivation with various points of view of their respective experts. From these various opinions have the same core, namely motivation is a driving force that converts the energy in a person into the form of real activities to achieve certain goals. From some of the above meanings, it can be concluded that the notion of motivation is a push that is in someone both from within and from outside a person to do something for the realization of a desired goal.

### III. Research Method

This type of research is a quasy experiment with a 2x2 factorial design. This research was conducted at SD 106163 which is located in JI, Bandar Klippa Tembung, Percut Sei Tuan District. The population in this study were all fourth grade students of the 2019/2020 school year with 50 students in 2 classes, namely V / a as many as 25 students and class IV / b as many as 25 students. Data collection techniques used in this study were questionnaires.
and learning outcomes tests. The data analysis technique used in this research is inferential statistical techniques. Hypothesis testing is done by using the Two Way Anova test with a significant level of 0.05. Before the Two Way Anova test is carried out, first the analysis requirements test is carried out, namely the normality test and the homogeneity test of the data. The normality test was carried out by the Kolmogorov-Smirnov test while the data homogeneity test was carried out by the Levene test with a significant level of 0.05.

IV. Discussion

4.1. Data Description

a. Student Learning Outcomes Taught by Project Based Learning Model

From the results of statistical calculations, it is known that the learning outcomes of students who are taught with the project based learning model get the lowest score, namely 73, and the highest score, namely 100, with an average of 86.17; the variant is 57.47 and the standard deviation is 7.58. The frequency distribution of the Civics learning outcomes of students taught using a project-based learning model is presented in the following figure.

![Figure 3. Histograms of Student Learning Outcomes Taught with a Project Based Learning Model](image)

From the histogram image above, it is known that 2 out of 25 students or 8% have learning outcomes below the KKM (75), while 23 students or 92% of other students have scores above the KKM.

b. Student Learning Outcomes Taught by Direct Learning Model

From the results of statistical calculations it is known that the learning outcomes of students who are taught with the Direct Learning Model get the lowest score, namely 63, and the highest score is 93, with an average of 78.40; the variant is 60.30 and the standard deviation is 7.77. The frequency distribution of student learning outcomes scores taught by the direct learning model is presented in the following figure.
From the table, it is known that 8 out of 25 students or 32% still have learning outcomes below the KKM (75), while 17 students or 68% of other students have scores above the KKM.

4.2. Prerequisite Test
a. Normality Test

<table>
<thead>
<tr>
<th>Table 2. Tests of Normality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Standardized Residual</td>
</tr>
<tr>
<td>for Civics Learning Outcomes</td>
</tr>
</tbody>
</table>

<sup>a</sup> Lilliefors Significance Correction

Based on the table above shows that the results of the normality test of the research data obtained the sig value of 0.378 > 0.05, thus it can be concluded that the research data were normally distributed.

b. Homogeneity Test

<table>
<thead>
<tr>
<th>Table 3. Levene's Test of Equality of Error Variances&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable: Civics Learning Outcomes</td>
</tr>
<tr>
<td>F</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>0.000</td>
</tr>
</tbody>
</table>

Based on the table above shows that the homogeneity test of the research data obtained the sig value of 0.996 > 0.05, thus it can be concluded that the research data group is relatively the same or is homogeneous.

4.3 Hypothesis Test

This research hypothesis testing using two-way ANOVA with 2x2 factorial. Hypothesis testing data can be seen in the following table:
Table 4. SPSS Output Two Way Anova Calculation
Tests of Between-Subjects Effects
Dependent Variable: Civics Learning Outcomes

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>1623,503*</td>
<td>3</td>
<td>541,168</td>
<td>12,841</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>336239,807</td>
<td>1</td>
<td>336239,807</td>
<td>7978,549</td>
<td>.000</td>
</tr>
<tr>
<td>Learning model</td>
<td>989,365</td>
<td>1</td>
<td>989,365</td>
<td>23,476</td>
<td>.000</td>
</tr>
<tr>
<td>Motivation to learn</td>
<td>323,381</td>
<td>1</td>
<td>323,381</td>
<td>7,673</td>
<td>.008</td>
</tr>
<tr>
<td>Learning model *</td>
<td>547,982</td>
<td>1</td>
<td>547,982</td>
<td>13,003</td>
<td>.001</td>
</tr>
<tr>
<td>Error</td>
<td>1938,577</td>
<td>46</td>
<td>42,143</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>342062,000</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>3562,080</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .456 (Adjusted R Squared = .420)

Table 5. Comparison of Civics Learning Outcomes Based on the Learning Model
Dependent Variable: Civics Learning Outcomes

<table>
<thead>
<tr>
<th>Learning model</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>PjBL Learning Model</td>
<td>87,383</td>
<td>1,325</td>
<td>84,716</td>
</tr>
<tr>
<td>Direct Learning Model</td>
<td>78,391</td>
<td>1,299</td>
<td>75,775</td>
</tr>
</tbody>
</table>

Table 6. Comparison of Civics Learning Outcomes Based on Learning Motivation
Dependent Variable: Civics Learning Outcomes

<table>
<thead>
<tr>
<th>Motivation to learn</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>High motivation</td>
<td>85,458</td>
<td>1,365</td>
<td>82,710</td>
</tr>
<tr>
<td>Low Motivation</td>
<td>80,317</td>
<td>1,257</td>
<td>77,786</td>
</tr>
</tbody>
</table>

a. First Hypothesis
Ho : µA1 ≤ µA2
Ha : µA1 > µA2

Based on the SPSS output, the ANOVA calculation results in Table 4, it is found that the value of Fcount = 23.476 and the significant value of the learning model is 0.000 <0.05. Thus it can be said that there is a significant difference between the average learning outcomes of students taught by the project based learning model compared to the direct learning model. Furthermore, based on the SPSS output regarding the comparison of Civics learning outcomes based on the learning model in Table 5, it is found that the average Civics learning outcomes of students taught with a project based learning learning model are 87.383. Meanwhile, the direct learning model is equal to 78.391. So that the hypothesis testing rejects Ho and accepts Ha. Thus it can be concluded that the Civics learning outcomes of students who are taught with the project based learning model are higher than students who are taught using the direct learning model.
b. Second Hypothesis
   Ho: \( \mu_{B1} \leq \mu_{B2} \)
   Ha: \( \mu_{B1} > \mu_{B2} \)

Based on the SPSS output from the ANAVA calculation in Table 4, it is found that the \( F_{\text{count}} = 7.673 \) and the probability or significant value is 0.008 <0.05. Thus it can be said that there is a significant difference between the average learning outcomes of students who have high learning motivation compared to the learning outcomes of students who have low learning motivation. Furthermore, based on the SPSS output regarding the comparison of Civics learning outcomes based on the level of student learning motivation in Table 6, it is found that the average Civics learning outcomes of students who have high learning motivation are 85.458. While the learning outcomes of students who have low learning motivation are 80.317. So that the hypothesis testing rejects Ho and accepts Ha. Thus it can be concluded that the Civics learning outcomes of students who have high learning motivation are higher than students who have low learning motivation.

c. Third Hypothesis
   Ho: A x B = 0
   Ha: A x B \neq 0

Based on the SPSS output, the ANAVA calculation results in Table 4, it is found that \( F_{\text{count}} = 13.003 \) and a significant value of 0.001 with \( \alpha = 0.05 \). Then it can be seen that the sig. 0.001 <0.05 so that the hypothesis testing rejects H_o and accepts H_a. Thus it can be concluded that there is an interaction between learning models and learning motivation in influencing student civics learning outcomes. The interaction of learning models and learning motivation in influencing student Civics learning outcomes can be seen in the following figure. Based on the SPSS output, the ANAVA calculation results in Table 4 show that \( F_{\text{count}} = 13.003 \) and a significant value of 0.001 with \( \alpha = 0.05 \). Then it can be seen that the sig. 0.001 <0.05 so that the hypothesis testing rejects H_o and accepts H_a. Thus it can be concluded that there is an interaction between the learning model and learning motivation in influencing student civics learning outcomes. The interaction of learning models and learning motivation in influencing student Civics learning outcomes can be seen in the following figure.
4.4 Discussion

Citizenship education lessons are known to have a lot of material and memorization so that PPKn lessons are difficult for students, which causes students to get bored in the learning process. For this reason, the teacher must use a learning model so that the learning process is not boring and more interesting. The use of good learning models that are taught to students can provide an increase in learning outcomes. For that every teacher must be able to create a fun learning Susana. The project based learning model is learning that basically uses projects or results made by students that can have a positive impact on improving student learning.

In the conventional learning model the responsibility of the teacher in teaching students is quite large and the role of the teacher in planning learning activities is very large, because in the conventional learning model teacher-centered learning whereas in the project based learning model students are stimulated to be able to solve problems, think at high levels, explore information, cooperate and improve communication skills through the teacher’s role as a guide. In this case, learning activities are not entirely dependent on the teacher who is expected to make class conditions interesting and fun.

Based on the results of the research conducted, it was found that the average PPKn learning outcomes of students who were taught with the project based leaning learning model were 86.17. Meanwhile, the average PPKn learning outcomes of students taught with a conventional approach amounted to 78.52. Therefore it can be said that in PPKn subjects, especially in terms of my ideals, it is more appropriate to teach using a project-based learning model considering that the average learning outcomes obtained by students are higher than the average learning outcomes of students taught with conventional approaches, or the approach that has been used by teachers in PPKn subjects.

Based on the results of the analysis during the research process, the researcher observed that each student has different abilities in understanding the lesson. The continuity of this research makes researchers closer to the object of the problem. The essence of the problem found was that the PPKn learning outcomes were not achieved. Therefore, by implementing a
project-based learning model, it is alleged that it can help students easily understand the concepts in my dream material. Based on these thoughts, it can be said that students’ PPKn learning outcomes will be better and increase if the teacher applies a project-based learning model to assist the daily learning process.

Motivation already exists when someone does an activity, but they may not be aware of it. According to Sofyan (2012: 67) "Motivation is a need that exists in humans which will lead to motives, and motives create an urge to move to fulfill it which is called encouragement". Motivation is the drive that exists in humans to carry out activities and have specific goals. Motivation to learn is internal and external encouragement to students who are learning to make changes in behavior, generally with several indicators or supporting elements. It has a big role in one's success in learning (Uno, 2011: 23).

Based on the results of the analysis, it can be concluded that students who have high motivation towards PPKn learning greatly influence the increase in learning outcomes. However, if students have low motivation, it will have a negative impact on learning outcomes. Student learning outcomes are very much determined by how much the student gets high motivation.

Jihad and Haris (2010: 25) which state that the learning model can be interpreted as a plan or pattern used in compiling curriculum, organizing student material, and giving instructions to teachers in class and in teaching plans. According to Trianto (2007: 1) which means that the learning model is a plan or pattern that is used as a guide in planning classroom learning. According to Trianto (2007: 1) which means that the learning model is a plan or pattern that is used as a guide in planning classroom learning.

Project-based learning model learning with learning motivation has interaction and is interrelated with learning outcomes. With the assumption that without a learning model, children's motivation will not be developed so that it will not produce high learning outcomes.

Students who have high motivation taught by direct learning model will feel less comfortable in learning. Do not have the heart's desire to discuss and exchange experiences. As a result, it can be difficult to achieve better learning outcomes. Friends to exchange limited experiences, so it is also limited in exchanging information to broaden horizons. Students feel tired of all their responsibilities in completing their own assignments. If students who have individual social skills are taught using the learning model, they will feel calm because the learning information comes from the teacher.

The results of hypothesis testing using two-way ANOVA for the third hypothesis, namely the interaction between learning models and student motivation in influencing student learning outcomes, get a value of $F_{\text{count}} = 13.003$ and a significant value of 0.001 with $\alpha = 0.05$. Then it can be seen that the sig. 0.001 <0.05 so that the hypothesis testing rejects $H_0$ and accepts $H_a$. Which means that there is an interaction between learning models and motivation in influencing children's critical thinking skills.
V. Conclusion

Based on the results of research and discussion, several conclusions can be drawn including the following:
1. The PPKn learning outcomes of students taught by the Project Based Learning (PjBL) learning model are higher than the direct learning model ($F_{count} = 23.476$ and the sig. $0.000 > 0.05$).
2. The learning outcomes of students who have high learning motivation are higher than students who have low learning motivation ($F_{count} = 7.673$ and sig. $0.008 > 0.05$).
3. There is an interaction between the learning model and learning motivation in influencing student PPKn learning outcomes ($F_{count} = 13.003$ and sig. $0.001 > 0.05$).

References


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