

THE EFFECT OF *PROBLEM SOLVING* AND LEARNING MOTIVATION ON SOCIAL STUDIES LEARNING OUTCOMES AT SDN KEBAYUNAN

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Abstract

In general, the breadth of social studies material in elementary schools has an impact on students who are less motivated to learn. The teaching method used by the teacher so far is still dominant using the lecture method. This has the influence of students' understanding of the material and student learning outcomes are inadequate. Social studies learning objectives at the elementary level are expected that students are able to have honest, disciplined, responsible, polite, caring, and confident behavior in interacting with family, friends, teachers, and the community as well as love for the motherland. One of the efforts that can be made to make Social Studies learning interesting and able to motivate students during a pandemic is to apply an *problem solving* integrated thematic-based. Through this learning, students are guided to solve a problem in a learning process that integrates several integrated thematic materials. Teachers and students carry out Learning From Home (BDR) assisted *Google Meet* with a series of materials for daily activities that can be directly applied by students in their environment. This research is a quantitative research with the type of experimental research and elementary school student respondents. The results showed that there was an influence of *problem solving* integrated thematic-based and student learning motivation on student learning outcomes in social studies learning. Learning characteristics are developed to contain material from several subjects at once which are packaged in everyday life situations in a theme.

Keywords: *problem solving*, integrated thematic, learning motivation, learning outcomes, social studies

1 INTRODUCTION

Going through education is one's effort to develop one's potential in order to have religious spiritual strength, self-control, personality, intelligence, noble character, and the skills needed by oneself, society, nation and state. Education is a necessity for everyone. So important is an educated human being that the government requires every child in Indonesia to go to school. With sufficient education it is hoped that they will be able to live a better life. An educated society will certainly have an impact on the country's development.

Humans as social beings really need other people in their lives. From birth to death, one cannot be separated from the help of others. Every day we interact with other people. Each other need each other so that there is reciprocity. One branch of science that studies social science is social science. In the 2013 curriculum it is stated that the social studies learning objectives in elementary schools are for students to have social attitude competencies namely "Showing honest, disciplined, responsible, polite, caring and confident behavior in interacting with family, friends, teachers and neighbors as well as love of the land." water". Understanding social studies material well should

be able to form the character of a society that is honest, disciplined, polite, caring, confident and responsible.

The character that is formed in society is not the result of instant habituation. It takes a continuous and continuous process. This can be started from when I was still in school. It is the students who are currently studying at educational institutions who must get this habituation so that in the future they become fully aware and responsible citizens. Through meaningful learning of course this can be realized. A meaningful learning process will certainly affect student learning motivation.

Student motivation is an important thing that should not be missed by the teacher's attention when teaching. The magnitude of a student's motivation will determine the magnitude of the quality of behavior that is displayed in learning because it is this motivation that functions as a driver and giver of hope (Hamdani, 2011). A student who has a strong urge to learn will certainly have high hopes in order to understand what is learned. Thus, it will certainly affect the mastery of the material being studied as well. Through mastery of good material, of course, it will affect learning outcomes. Seeing the importance of learning motivation, the learning delivered in class should be able to arouse student learning motivation well. Teachers must understand how important learning motivation is and be able to encourage students to have good learning motivation, especially for learning.

So far, social studies learning is still mostly delivered in a teaching style that seems monotonous, such as using only the lecture method or only with assignments. This is because Social Sciences material is considered very broad and a lot so that teachers worry about not being able to complete the material on time. Even though with this method, student activity is very low. With low student activity, it will certainly affect their learning motivation. The lecture method can also cause student boredom while studying so this will certainly affect the student's social studies learning outcomes themselves. The lack of variations in teacher learning methods in teaching is thought to be the main factor in low student learning motivation so that student learning outcomes are less than optimal. For this reason, it is necessary to vary teaching by applying methods that are in accordance with the characteristics of the IPS material. One method that teachers can choose is to use an *problem solving* integrated thematic-based *Problem solving* according to Hamdani (2011) is a way of presenting lessons by encouraging students to seek and solve a problem or problem in order to achieve teaching goals. Through learning *problem solving* students are trained to deal with various problems both personal and group problems to be solved alone or together (Floean, 2016). The learning orientation is investigation and discovery which is basically problem solving.

The main purpose of this study is to investigate and research the basis of problem solving. IPS subject matter is a study of real everyday life, so it is felt that it will be very appropriate if in learning to use problem-solving-based learning. In addition, learning that combines several materials from different subjects will also provide different learning experiences to students. Simultaneously students learn social studies material in Indonesian and Civics in one theme. This will make students unconsciously learn social studies material that was previously considered difficult.

In the Law on the National Education System number 20 of 2003 it is stated that the purpose of Indonesia's national education is to develop the potential of students to become human beings who believe, fear God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become a democratic and responsible citizen (State Secretary of the Republic of Indonesia, 2003).

Through learning, it is hoped that one's potential can develop to the fullest. The ability from not knowing to knowing, not being able to be able to. This is as expressed by Yamin (2014) that learning is a conscious human effort to escape as much as possible from ignorance about many things. Learning is engineered in such a way as to be able to become a process of understanding situations and realities that are still biased in meaning. Through the learning process, a person is expected to produce more abilities than before learning. Sudjana (2011) suggests that learning outcomes are abilities possessed by students after they receive their learning experience. Learning outcomes according to Bloom (1979) in Rusmono (2014) are changes in behavior which include three domains, namely the cognitive, affective, and psychomotor domains.

Learning outcomes are not simply obtained by students. There are several factors that influence the acquisition of student learning outcomes in learning. These factors can come from within the students themselves (internal factors) or external factors (external factors). Internal factors include physical factors, health factors and psychological factors, while external factors come from parents, school and community (Nurul, 2020). Learning cannot just take place without involving related aspects. Syah (2017) explains that in principle, ideal learning outcomes must include all psychological aspects that change as a result of student learning experiences and processes. However, it is difficult to know the disclosure of changes in the behavior of all these aspects, especially aspects of students' feelings. Therefore, what can be done is only to take snapshots of changes in behavior that are considered important and are expected to reflect changes that occur

as student learning achievements, both those with dimensions of creativity and taste as well as those with intentional dimensions.

Students will be able to learn more effectively if they have great learning motivation. This motivation will encourage him to study better and harder than before. Motivation or interest in learning according to Hamdani (2011) is the desire to learn from an individual. Learning motivation can come from within the student or generated, enhanced, and maintained from external factors. Meanwhile, according to Rachman (2015) motivation is defined as a person's strength (energy) that can lead to a level of persistence and enthusiasm in carrying out an activity, both from within the individual itself (intrinsic motivation) and from outside the individual (extrinsic motivation).

In the context of psychological studies, Sondang and Makmun (2004) in Rachman (2015) suggest that to understand individual motivation can be seen from several indicators, namely (a) activity duration; (b) activity frequency; (c) persistence in activities; (d) fortitude, tenacity and ability to face obstacles and difficulties; (e) devotion and sacrifice to achieve goals; (f) the level of aspirations to be achieved by the activities carried out; (g) level of achievement qualification or product (output) achieved from the activities carried out; (h) the direction of attitude towards the target. A student who has the motivation to learn can learn more efficiently if he tries to learn optimally. Learning motivation can come from within students who diligently read books and have a high curiosity about a problem. Learning motivation can be generated, enhanced, and maintained by external conditions, such as the presentation of lessons by teachers with various media, appropriate methods, dynamic communication, and so on (Hamdani, 2011). Thus, if a teacher wants to increase student motivation in learning, this can be done by choosing learning strategies that are varied, interesting and in accordance with the circumstances of the students, the material and the environment the students are in. With this external motivation, it is hoped that motivation within the students themselves will slowly increase.

learning method *problem solving* according to Hamdani, (2011) is a way of presenting lessons by encouraging students to seek and solve a problem or problem in order to achieve teaching goals. In this learning activity students are trained to deal with various problems, both personal and group problems to be solved alone or together. Whereas Djamarah & Zain (2013) revealed that the *problem solving* is not just a teaching method, but also a method of thinking, because in *problem solving* can use other methods that start with searching for data to draw conclusions.

The advantages of the problem solving method according to Hamdani (2011) are being able to train students to deal with problems or situations that arise spontaneously, students become active and take initiative and be responsible, education in schools is relevant to life, it is very difficult to determine which problems appropriate to the student's ability level. While the weakness is that it takes a long time, meaning that it requires a longer time allocation compared to other learning methods, passive and lazy students will be left behind, it is very difficult to organize lesson material.

Integrated thematic learning is a form of integrated learning model that combines a concept in several materials, lessons or fields of study into one particular theme or topic of discussion so that there is integration between knowledge, skills and values that enable students to actively discover scientific concepts and principles in a holistic, meaningful and authentic (Riadi, 2020). According to Tirtoni (2018) integrated learning is the linking of several subjects into one theme. In integrated learning, students can take advantage of the skills developed from studying the interrelationships between subjects. Integrated learning helps students to solve problems and think critically to be developed through skills in real or practical situations.

The characteristics of thematic learning according to the Puskur Team (2006) in Sukayati & Wulandari (2009) are student-centered learning, providing direct experience to children, separation of invisible or inter-mapped subjects, presenting concepts from various subjects in a learning process so that it is meaningful, results learning can develop according to the interests and needs of children.

The benefits of this thematic learning are numerous. Some of the benefits of thematic learning according to the Puskur Team (2006) in Sukayati & Wulandari (2009) are that a lot of the material contained in several subjects has related concepts, so that learning becomes more meaningful and intact, students easily focus attention because several subjects are packaged in one the same theme, students can learn knowledge and develop various competencies in several subjects in the same theme, thematic learning trains students to make more and more connections between several subjects, so that they are able to process information in a way that suits their thinking power, and allows the development of concept networks, saves time because several subjects are packaged in a theme and presented in an integrated manner in the allocation of planned meetings. Other time can be used for strengthening, enrichment, skills development, and remedial.

The scope of IPS material teaches students to be able to become future generations and be useful for the interests of themselves, society and their nation. For this reason, the scope of social studies subject matter for elementary schools begins with an introduction to the environment and the closest community, starting at district, provincial, national and international levels. There is a connection between one region and another. The international environment in the scope of SD is limited to the introduction of the ASEAN environment. Social studies subjects aim to produce citizens who are religious, honest, democratic, creative, critical, enjoy reading, have learning abilities, are curious, care about the social and physical environment, contribute to the development of social and cultural life, and communicate productively. The scope of IPS consists of knowledge, skills, values and attitudes developed from society and social science disciplines. Mastery of these four contents is carried out in an integrated learning process through a process of reviewing knowledge content (Ministry of Education and Culture, 2017).

Thematic learning approaches in social studies are often called interdisciplinary approaches. The thematic learning model is essentially a learning system that allows students both individually and in groups to actively seek, explore, and discover concepts and principles holistically and authentically (Depdikbud, 1996) in Kartini (2016). Through thematic learning students can gain direct experience, so they can add strength to receive, store, and produce impressions about the things they learn.

Relevant research is used in this study as material to find out about the study and determine the differences in this research compared to previous studies. These other studies include research conducted by Dewi (2021) entitled *Implementation of Problem Solving to Improve Social Studies Learning Outcomes* and also research conducted by Hartmann et al. (2021) entitled *Preparatory effects of problem solving versus studying examples prior to instruction*. Another study by Rokhman & Ni'matullah (2020) with the research title *Problem Solving, Learning Interest, and Learning Experience on Critical Thinking Ability*. Also research by Sari & Zaiyasni (2020) entitled *Improving integrated thematic learning processes using problem solving models in grade V SD*.

2 METHODOLOGY

type of research includes quantitative research with experimental research methods. The main characteristic of experimental research is the existence of variable control by giving *treatment* to the experimental group. The treatment given in this study was the application of *problem solving* and learning motivation. Learning method *problem solving* was called the experimental group and the group that used conventional methods was called the control class. Each group will be divided into two categories based on the level of students' learning motivation, namely groups of students with high learning motivation and groups of students with low learning motivation.

As for the research population, all students at SDN Kebayunan, Tapos District, Depok City. The sampling technique was carried out by means of random sampling on sixth grade students at SDN Kebayunan which consisted of 32 VIA grade students and 32 VIB grade students. Group 1 consisted of 32 students in class VIA which were then divided into two categories, namely children with high learning motivation and children with low learning motivation. Grouping children based on motivation depends on the results of the learning motivation questionnaire distributed to students before learning is carried out. After that the results of the questionnaire will be calculated as a whole and the median value is sought. Students who have scores above the median are declared as children with high learning motivation while children who have scores below the median are declared as children with low learning motivation.

Group 2 consisted of 32 students in class VIB which were also divided into two categories, namely children with high learning motivation and children with low learning motivation. This grouping is the same as the grouping in the first group. Then group 1 received treatment with the application of *problem solving* while group 2 was taught using conventional learning strategies.

Data collection techniques in this study used tests, observations, questionnaires and documentation studies. Sources of data used are primary data and secondary data. The primary data source was obtained from the results of observations made during the lesson with *problem solving* on social studies material in class VI SDN Kebayunan, Tapos District, Depok City. Meanwhile, secondary data was obtained from a documentation study in the form of *problem solving* , a list of grade VI students' learning outcomes in social studies subjects.

The research was conducted during a pandemic with students studying from home. Learning is carried out using Google Meet media and also Google Form to collect student learning outcomes.

3 FINDINGS AND DISCUSSION

At the beginning of the meeting students were given a pretest and also filled out a motivational learning questionnaire. The initial test was carried out by giving 31 questions in the form of multiple choice questions and also a learning motivation questionnaire consisting of 28 statement items. These questions have been tested and declared valid. The average pretest result for the experimental class was 47.28 and for the control class was 54.44. As for the results of the learning motivation questionnaire, it was found that 16 students in the experimental class had low learning motivation and 16 students had high learning motivation. For the control class, there were 13 students with low learning motivation and 19 students with high learning motivation. After learning by applying the *problem solving* integrated thematic-based The questions used are the same as the questions given during the pretest, namely 31 questions in the form of multiple choices. The post-test results showed that the average value of the experimental class was 71.57 and that of the control class was 63.91. The data is as shown in Table 1.1 below:

Table 1.1 Gain Value and Standard Deviation

Tes	Statistik	Kelompok			
		<i>Problem Solving</i> based on Integrated Thematic		Conventional	
		High Motivation	Low Motivation	High Motivation	Low Motivation
Pretest	N	16	16	19	13
	Average	53	43	57	54
	Standard Deviation	10,27	14,11	14,94	17,06
Posttest	N	16	16	19	13
	Average	76	67	69	56
	Standard Deviation	9,80	16,26	15,45	18,10
N-Gain		0,50	0,42	0,18	0,05
Group N-Gain		0,46		0,12	

Based on the table above, it shows that the N-Gain value for students who study with the *problem solving* is 0.50 for students with high learning motivation and 0.42 for students with low learning motivation. While students who study using the conventional method, the N-Gain value for students with high learning motivation is 0.18 and 0.05 for students with low learning motivation. This shows that students who study with the *problem solving* have higher N-Gain values than students in conventional classes, namely the total N-Gain for classes with *problem solving* of 0.46 in the medium category. while students with conventional learning 0.12 in the low category. Thus

it can be concluded that the *problem solving* is more effective in improving student social studies learning outcomes.

Then the normality test and homogeneity test were carried out on the research data. The normality test was carried out to find out whether the study population was normal or not, while the homogeneity test was carried out to find out that the data obtained from the two study groups were similar or homogeneous. Based on the results of the normality test for the two groups, it was shown that the data for both groups included normally distributed data. Meanwhile, the results of the homogeneity test show that the data of the two groups are expressed as homogeneous or similar data.

Two-way Anova was used to test the statistical hypothesis with the following calculation results:

Table 1.2 Two-way Anova Hypothesis Test Results

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F-count</i>	<i>F-table</i>
Learning method	945.5625	1	945.5625	6.932201591	3.99
Motivation learning	1885.785468	1	1885.785468	13.82525747	3.99
Interaction	339.3137223	1	339.3137223	2.487610418	3.99
Within	8184.08831	60	136.4014718		
Total	11354.75				

Based on the table above, the results for the learning method are 6.93 and the results are 3.99, for learning motivation is 13.82 and the results are 3.99, and for the interaction of the two variables is 2.48 and the results are 3.99. Thus for the learning method with the result = $6.93 > 3.99$ then it is rejected so the decision is that there is a real difference between the learning outcomes of students who use *problem solving* and the learning outcomes of students who use conventional learning methods. This can happen because in the experimental class, using *problem solving* in the learning process even though learning is done online. Learning is carried out using the *Google Meet*. Thus, even though learning is carried out online, students can still learn actively in class discussions through the *Google Meet*. With direct interaction between teachers, students and

learning resources, the level of student understanding is getting better. By seeing directly and conveying thoughts directly, students are unintentionally fully involved in learning. Student involvement in learning is a very good thing.

As for learning motivation with result = 13.82 \geq 3.99 then it is also rejected so the decision is that there is a difference in learning outcomes between students who have high learning motivation and students who have low learning motivation. Motivation to learn becomes an influential thing in the learning process because students' great curiosity about teaching materials will encourage them to study these things more deeply. The amount of motivation to learn affects the attitude of students in learning. How strong a person's motivation is will determine how much the quality of behavior he displays, both in the context of learning, work and in his life (Rachman, 2015).

As for the interaction between learning methods and motivation to learn the results are = 2.48 $<$ = 3.99 then it is accepted so the decision is that there is no interaction between learning methods and student learning motivation in influencing student learning outcomes.

The effectiveness of learning plans can be seen based on system theory so that effectiveness criteria must reflect the entire *input-process-output*, not only *output* or results, but also reflect the reciprocal relationship between the learning plan and the surrounding environment (Mulyasa, 2009). The learning method applied and student learning motivation will be able to influence learning outcomes if both are carried out simultaneously and supported by the surrounding environment, including the learning atmosphere and learning facilities (Sudjana, 2020). The learning method applied and students' learning motivation in class showed insignificant results which could be influenced by the learning atmosphere and learning facilities. The online learning atmosphere will certainly provide a different atmosphere from face-to-face classroom learning. One of the shortcomings in the implementation of distance learning is that some students find it strange to study alone without direct interaction with the teacher or with their friends. In addition, for students who lack motivation or high initiative it becomes a problem in the learning process and also access to networks or supports such as quotas are also very influential in carrying out distance learning via online (Ministry of Education and Culture, 2020).

4 CONCLUSIONS

The conclusions that can be drawn from the results of the analysis and discussion are that the *problem solving* effective in improving student social studies learning outcomes. This is shown by the average score of students who apply the *problem solving* is higher than the average score

of students who apply conventional methods. Student learning motivation is effective in improving student social studies learning outcomes. This is shown by the average score of students with high learning motivation is higher than the average value of students with low learning motivation. Learning methods *problem solving* and learning motivation simultaneously have no effect on improving student learning outcomes. This is due to other factors that also influence learning outcomes in the learning process including the learning atmosphere that is less supportive because it occurs online without face-to-face meetings during the learning process.

Suggestions that can be conveyed are teachers can apply *problem solving* to social studies learning so that the impact of this learning will be directly felt by students, teachers can make improvements to learning by applying *problem solving* so as to improve student learning outcomes, For future researchers, they can conduct similar research by examining other variables to improve the methodological aspects so that the results are more accurate.

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