



Application of a Problem Based Learning (PBL) Model to Increase Motivation and Learning Outcomes of Class VII Students

Sisca Lusianna Sirait¹, Yusna Arifin²

Economics Teacher Professional Education, IPTS, Indonesia

Email: ¹siscalusiannasirait19@gmail.com, ²yyusna83@gmail.com

ABSTRACT

Motivation is one of the factors that influences student success. A person will get the desired results in learning if within him there is a desire to learn. Motivation as the main factor in learning functions to create something fundamental to drive learning actions. In helping children improve their learning achievements, educators, especially teachers, must create a climate that stimulates children's creative thinking and skills at school. Factors that influence the learning process are internal factors originating from students or external factors originating from outside within students. Research findings show low student learning motivation, including the following: 1) Teachers' teaching methods and methods are monotonous and unpleasant, 2) Students' economic and socio-cultural background, 3) Most students from weak economic backgrounds do not have strong motivation to study and continue their education to a higher level. 4) Advances in technology and information, 5) Feeling inadequate in certain subjects, such as mathematics and English and 6) Students' personal problems with parents, friends and the surrounding environment. This research aims to determine the effect of learning motivation on student learning achievement in the Integrated Social Sciences subject, Economics class VII. Researchers as teachers apply the problem-based learning (PBL) model in an effort to increase the learning motivation of class VII students.

Keywords : Motivation, learning outcomes, Problem Based Learning

Introduction

Education is a process carried out consciously by several related parties. In terms of education that occurs in the school environment, the parties who actively interact in terms of learning and teaching activities are teachers and students. According to the Department of Cultural Education (2008), the success of education at school can be monitored from the learning outcomes that students have achieved. At the end of each learning process, an evaluation is always carried out to determine the level of student success in the learning process that has been carried out over a certain period of time. Evaluation is a process of collecting data to determine to what extent, in what terms, and how educational goals have been achieved. Motivation is one thing that can support the achievement or success of the learning process. The teacher's role is very important to motivate students during learning activities, explain the goals to be achieved when students carry out learning activities, and design learning activities that excite students. Therefore, educators need to improve their ability to motivate students so that they have high motivation to learn (Jafar Iddik and A. Soebandi: 193). Every student must have varying levels of learning motivation. There are those who are enthusiastic about learning, there are even those who are not enthusiastic. Learning, according to Hamalik (2007: 27) is modifying or strengthening behavior through learning. According to this understanding, students' learning motivation comes from internal and external factors. Internal factors such as psychological factors, physical factors and fatigue factors that exist within the students themselves. Meanwhile, external factors are the

opposite, namely factors that come from outside such as family, school or society (Isnawati & Setyorini, 2012). Low learning motivation is the absence of encouragement within students in carrying out learning activities and the absence of direction for learning means there is no enthusiasm within students so that the desired goals cannot be achieved (Susilawati 2011: 145-158). The phenomenon that occurs in the field related to learning motivation is that teachers never provide motivation and reinforcement to students so that students are enthusiastic in learning and teaching activities in class. In learning at school, the teacher is one of the factors that is quite important in the learning process. Teachers should choose and use appropriate learning strategies to increase student motivation in learning. Apart from using appropriate learning strategies, teachers must also pay attention to learning that involves students being active in learning, both mentally, physically and socially and can use reasoning and thinking skills. ***To foster student enthusiasm, fun teachers are needed.*** Meanwhile, the duties/obligations of teachers according to Law No. 14 of 2005 article 20 is as follows: (a) Planning learning, implementing a quality learning process and assessing and evaluating learning outcomes (b) Improve and develop academic qualifications and competencies on an ongoing basis in line with developments in science, technology and art (c) Act objectively and not discriminate based on considerations of gender, religion or family background and socio-economic status of students in learning, (d) Uphold statutory regulations, laws and teachers' codes of ethics, as well as religious and ethical values (e) Maintain and foster national unity and unity. One of the characteristics of a teacher who is pleasant and is expected to be able to motivate is that he is flexible and not rigid, but still has principles. They have the ability to understand students better, understand students' characters, learning styles, and what students expect. However, they remain firm in making decisions and carrying them out. Motivation is a change in energy within a person's personality which is characterized by the emergence of affectivity and reactions to achieve goals, as well as encouragement from within a person and this encouragement is the driving force.

The problems encountered during learning activities at the school were the large number of students chatting and joking with their friends and the students feeling bored with learning in class. This can be seen from students' attention when the teacher explains the learning material, student participation in learning is still low, students rarely ask questions during learning, when the teacher asks students to work on the questions given, students do not do it to find a solution to the problem. but joking with his friends. Information was obtained from teachers who taught in class, that students' learning motivation was quite low, there was no student curiosity about something, social and family environmental factors were not yet supportive. To increase student motivation, teachers should choose and use appropriate learning strategies to increase student motivation in learning. Learning motivation is a force (power motivation), a driving force or a tool that builds a strong willingness and desire in students to learn actively, creatively, effectively, innovatively and enjoyable (Suryana, 2014). In this modern era, learning is not just theory , but requires practice that is useful in society. (Eveline, 2015) states that learning is a complex process which contains aspects of developing knowledge, developing memory and awareness, developing enriching meaning of interpretation and reality, as well as developing scientific behavior and obsession. (Syaiful Bahri Djamarah), that: Teachers must have strategies so that students can learn effectively and efficiently, achieving the expected goals. One of the steps to having this strategy is to master presentation techniques or what are usually called teaching methods. On this basis, the Inquiry learning model , contextual learning model, expository learning model, problem-based learning model, cooperative learning model, *project based* learning model , PAIKEM learning model, quantum learning model (*Quantum Learning*), integrated learning model, PAIKEM learning model were born. multigrade classes, structured assignment learning model, portfolio learning model, thematic learning model, Hamdayama (2016, pp. 132-182) From the obstacles above, a very suitable solution is to apply the problem-based learning (PBL) model which is based on the view that the curriculum must be related to children's real life experiences. The problem based learning model is a learning model that can be used as a solution to this problem. The problem based learning model has advantages over conventional learning models. According to Saragih (2017), conventional learning still uses lecture and question and answer processes , so that some of the learning materials are still not contextualized with students' real lives, which makes it difficult for students to analyze, conclude and evaluate the results of the benefits of the learning process that has been carried out in the classroom. . One learning process that encourages students to be able to solve a learning problem and train students' thinking skills in solving problems is the problem -based learning model . The advantages of the problem-based learning model are 1) Students are trained to always think critically and are skilled in solving a problem, 2) Can trigger increased student activity in class, 3) Students are accustomed to learning from relevant sources, 4) Learning activities runs more conducive and effectively because students are required to be active. Based on the description above, it is necessary to conduct research on "Application of the problem based learning (PBL) model to increase the motivation and learning outcomes of class VII students" to find out whether the use of the problem based learning model can be used to increase the motivation and learning outcomes of class VII students. VII.

Research Methodology

This research is a type of classroom action research (PTK) proposed by Kemmis & Taggart, where in the

research model there are four stages, namely, planning, action, observation and reflection which are carried out through several cycles, the cycle will be stopped if the student's motivation and learning outcomes have reached there has been an increase. The instrument used to obtain data on student learning motivation is a questionnaire prepared based on the operational definition of learning motivation variables and the instrument used to obtain data on student learning outcomes is test questions prepared based on a grid of Economic Activities material. The data analysis technique used in this research is quantitative descriptive data analysis technique. With this analysis technique, the average learning motivation and average learning outcomes of students who were taught using the problem based learning model and after being taught using the problem based learning model will be compared .

Results and Discussion

The implementation phase of learning using the problem based learning method cycle 1 was carried out on Thursday 12 December 2023 at 14.00 – 15.20 WIB in class VII at SMP Negeri 5 Bonai Darussalam. Using the RPP that had been prepared previously, this learning was carried out by 19 students. The implementation steps were divided into preliminary, core and closing activities. In the introduction there are several activities carried out including opening the lesson with greetings and prayer, attendance by asking students who their friends are who are not present, doing Literacy (One day One verse), conveying the learning material to be studied, conveying learning objectives, motivating students, explain the assessment techniques that will be used, link the material to be studied with previous material. The core activity begins by randomly dividing students into 4 small groups. The researcher as a teacher distributes LKPD and explains the problem that will be used as discussion material to each group, after each group has received the problem that will be discussed, then each group discusses the problem to be solved, in the process of solving this problem the students use learning resources in the form of textbooks and sources of information that have been prepared by researchers as teachers beforehand. In this activity, the researcher who acts as a teacher monitors the progress of the discussion and facilitates students if there are groups that have difficulty solving the problems they are facing. This discussion lasts for 20 minutes. When students discuss, the researcher as a teacher assesses the students' spiritual and social attitudes. After the discussion in each group is finished, 2 groups will present the results of their discussion in front of the class, the other 2 groups will provide responses to the other groups' presentations, at this stage the researcher who acts as a teacher also adds input to the groups regarding the results of their presentation, at At this stage, each group is given a maximum of 10 minutes to present. In the closing activity students were asked to summarize their learning results, after that students were asked to work on quiz questions by answering questions in the practice book. The quiz questions read by the researcher as a teacher are the learning material discussed. Next, the researcher who acts as a teacher delivers the material that will be studied at the next meeting and ends the meeting with prayer and closing greetings. In implementation activities, observations are also made, at this stage observations are made of the learning process, observations start from when class time starts, in implementation, this observation stage coincides with the implementation stage. From the results of observations, it was discovered that students No involved in a way active in learning, students not enough enthusiastic on moment process learning, researchers as teachers still use the lecture method in learning, researchers as teachers have not apply method learning Which creative And innovative and researcher as a teacher seldom use media Study Which interesting. After the observation is complete, the reflection stage is carried out. At this stage, an analysis of the level of success in implementing learning is carried out based on data obtained at the observation stage which will be used to determine the level of success in implementing learning using the problem based learning model. The results of the analysis will also be used as improvements for the next cycle if the results of the analysis do not meet the criteria for successful implementation. learning. The results of the implementation of cycle 1 learning are the results of assessing attitudes, assessing knowledge and assessing student learning skills.

Cycle 1

Appendix 1 : Spiritual Attitude Sheet Evaluation Self Attitude Spiritual

Class : V I I

Date : December 12, 2023

No	Name Student	ASPECT												Conclusion (Modus)
		Pray before and after implementing something				Saying the feeling thanks for the gift Lord				Greeting before And afterconvey opinion/presentation				
		1	2	3	4	1	2	3	4	1	2	3	4	
1	Adeliza				√				√				√	12/3 = 4 (Very Good)

2	Daniel Rianto			√							√		8/3 = 2.7 (Good)
3	Deni Kesuma			√			√				√		8/3 = 2.7 (Good)
4	Farman Zai		√				√					√	8/3 = 2.7 (Good)
5	Fincer Syahputri Zai				√			√			√		3 = 3.3 (Good)
6	Haris Christian	√						√			√		7/3 = 2.3 (Enough)
7	Miesdariah		√					√			√		8/3 = 2.7 (Good)
8	M. Nur Fahrezi			√			√				√		8/3 = 2.7 (Good)
9	Nur Fadilah	√					√					√	7/3 = 2.7 (Good)
10	Petravita Pandiangan				√		√					√	10/3 = 3.3 (Good)
11	Rafindra			√					√			√	11/3 = 3.7 (Very Good)
12	Rival Aditya				√			√				√	11/3 = 3.7 (Very Good)
13	Rivaldo			√				√			√		9/3 = 3 (Good)
14	Rizal Saputra Gea	√							√		√		8/3 = 2.7 (Good)
15	Rosalina br. Sianturi				√				√			√	12/3 = 4 (S. Good)
16	Siti Aminah Harahap			√		√						√	8/3 = 2.7 (Good)
17	Widia Ningsih				√		√				√		9/3 = 3 (Good)
18	Prayuga Hero				√			√				√	11/3 = 3.7 (Very Good)
19	Yudika Siringo-ringo			√					√			√	11/3 = 3.7 (Very Good)
Number of students who have a score of 1 = Final Score ≤ 1.5 = Less											0		
Percentage of Students who have a Poor Predicate											(0/19) x 100 % = 0 %		
Number of students who have a score of 1.5 < Final Score ≤ 2.5 = Sufficient											1 Student		
Percentage of Students who have a Sufficient Predicate											(1/19) x 100% = 5%		
Number of students who have a score of 2.5 < Final Score ≤ 3.5 = Good											12 Students		
Percentage of Students who have a Good Predicate											(12/19) x 100% = 63%		
Number of students who have a score of 3.5 < Final Score = 4 = Very Good											6 Students		
Percentage of Students who have Excellent Predicate											(6 / 19) x 100 % = 32 %		

Information :

4 = always, if you always do as stated

3 = often, when often do suitable statement

2 = sometimes, when sometimes do and often no do

1 = never, when never do

Total Score ranges between: 1-4

1 = Final Score ≤ 1,4 : Less

1,5 < Final Score ≤ 2,4 : Sufficient

2,5 < Final Score ≤ 3,4 : Good

3,5 < Final Score = 4 : Very Good

Appendix 2 : Sheet Evaluation Self Attitude Social

Class : V I I

Date : December 12, 2023

Date : December 12, 2023														
No	Name Student	Aspect												Conclusion (Modus)
		Work Same				Responsibility				Discipline				
		1	2	3	4	1	2	3	4	1	2	3	4	
1	Adeliza				√		√						√	10/3 = 3.33 (Good)
2	Daniel Rianto		√					√					√	9/3 = 3 (Good)
3	Deni Kesuma			√				√					√	9/3 = 3 (Good)

4	Farman Zai				√				√			√		11/3 = 3.7 (S. Good)
5	Fincer Syahputri Zai				√				√				√	12/3 = 4 (S. Good)
6	Haris Christian			√				√					√	9/3 = 3 (Good)
7	Miesdariah		√					√				√		7/3 = 2.3 (Enough)
8	M. Nur Fahrezi	√						√			√			6/3 = 2 (Enough)
9	Nur Fadilah			√					√			√		9/3 = 3 (Good)
10	Petravita br. Pandiangan			√				√				√		9/3 = 3 (Good)
11	Rafindra				√			√					√	11/3 = 3.7 (S. Good)
12	Rifal Aditya		√					√					√	8/3 = 2.7 (Good)
13	Rivaldo				√			√					√	9/3 = 3 (Good)
14	Rizal Saputra Gea				√				√				√	9/3 = 3 (Good)
15	Rosalina br. Sianturi			√				√				√		8/3 = 2.7 (Good)
16	Siti Aminah Harahap		√						√			√		8/3 = 2.7 (Good)
17	Widia Ningsih		√					√					√	8/3 = 2.7 (Good)
18	Prayuga Hero			√				√					√	10/3 = 3.3 (Good)
19	Yudika siringo-ringo				√			√				√		10/3 = 3.3 (Good)
Number of students who have a score of 1 = Final Score ≤ 1.5 = Less													0	
Percentage of students who have a Poor Predicate													$(0/19) \times 100\% = 0$	
Number of students who have a score of $1.5 < \text{final score} \leq 2.5$ = sufficient													2 students	
Percentage of students who have a sufficient predicate													$(2/19) \times 100\% = 10\%$	
Number of students who have a score of $2.5 < \text{Final Score} \leq 3.5$ = Good													14 students	
Percentage of students who have a good predicate													$(14/19) \times 100\% = 74$	
Number of students who have a score of $3.5 < \text{Final Score} = 4$ = Very Good													3 students	
Percentage of students who have a Very Good Predicate													$(3/19) \times 100\% = 16\%$	

Information :

4 = Always, if you always do what is stated

3 = Often, if you often do what is stated

2 = Sometimes, if sometimes do as stated

1 = never, if you never do what is stated

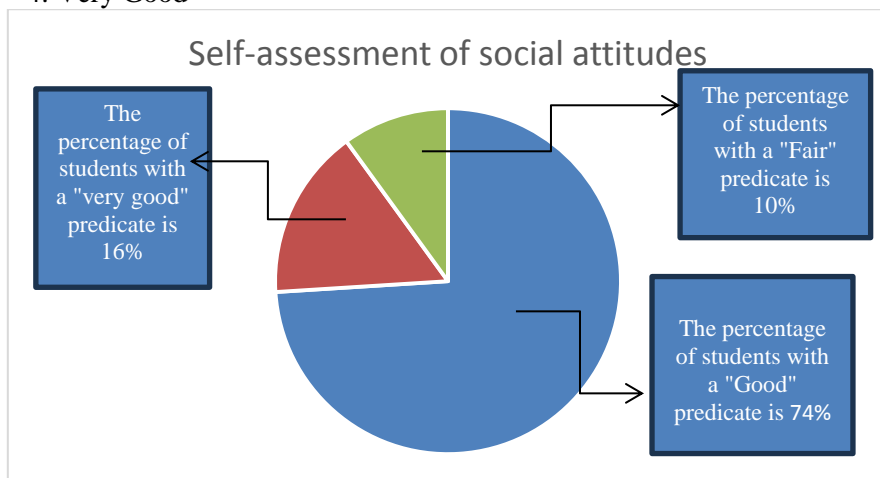
Total score ranges between: 1-4

1. Final Score ≤ 1.5 : Poor

2. $1.5 < \text{Final Score} \leq 2.5$: Sufficient

3. $2.5 < \text{Final Score} \leq 3.5$: Good

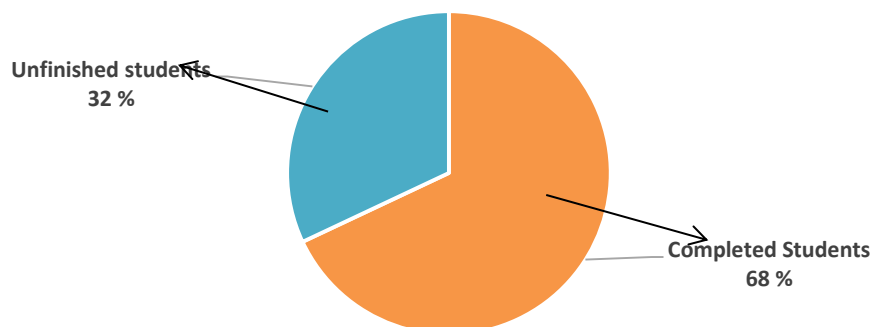
4. $3.5 < \text{Final Score} = 4$: Very Good



Appendix 3 : Student Formative Assessment Sheet**Class : VII****Date : December 12, 2023**

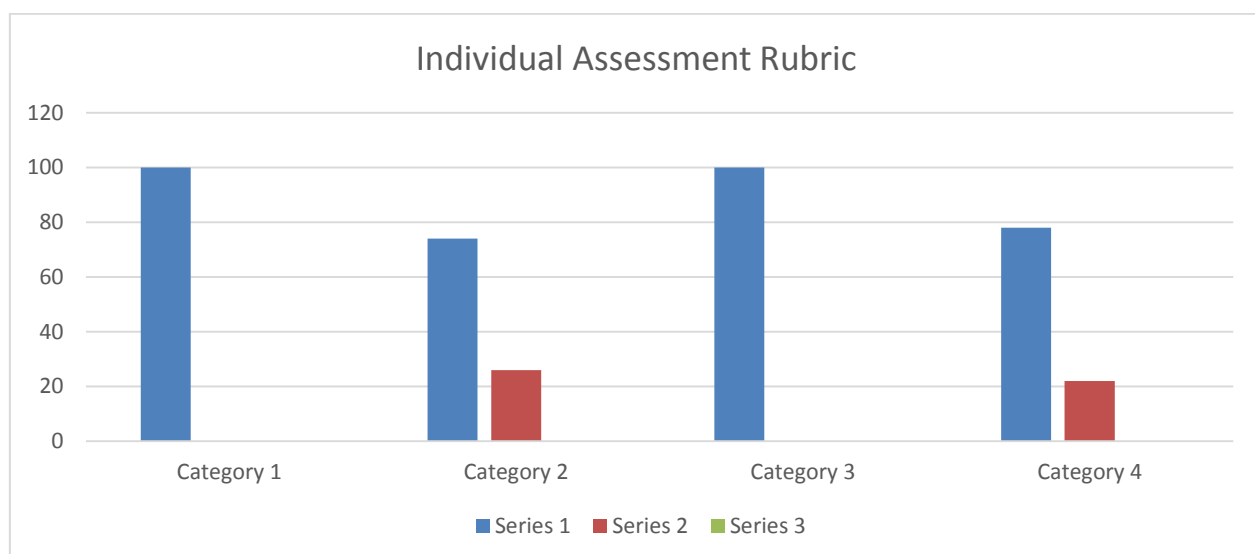
No	Student's name	KKM	Mark	Information
1.	Adeliza	72	98	Complete
2.	Daniel Rianto	72	65	Not Completed
3.	Deni Kesuma	72	60	Not Completed
4.	Farman Zai	72	62	Not Completed
5.	Fincer Syahputri Zai	72	95	Complete
6.	Haris Christian	72	63	Not Completed
7.	Miesdariah	72	86	Complete
8.	M. Nur Fahrezi	72	73	Complete
9.	Nur Fadilah	72	75	Complete
10.	Petravita br. Pandiangan	72	63	Not Completed
11.	Rafindra	72	94	Complete
12.	Rival Aditya	72	85	Complete
13.	Rivaldo	72	87	Complete
14.	Rizal Saputra Gea	72	86	Complete
15.	Rosalina br. Sianturi	72	83	Complete
16.	Siti Aminah Harahap	72	80	Complete
17.	Widia Ningsih	72	77	Complete
18.	Prayuga Hero	72	82	Complete
19.	Yudika siringo-ringo	72	60	Not Completed
Number of Values		1474		
Average		$1474 / 19 = 77.6$		
Number of students who completed		13 Students		
Percentage of students who complete		$(13 / 19) \times 100 \% = 68 \%$		
Number of students who have not yet completed		6 Students		
Percentage of students who have not completed		$(6 / 19) \times 100\% = 32 \%$		
The highest score		98		
Lowest Value		60		

Graph of Completed and Incomplete Student Scores



Appendix 4 : Individual Assessment Rubric (Sheet Work Participant Educate)
Class : VII
Date : December 12, 2023

No	Student's name	Rated aspect							
		is participant d idik can follow this lesson well		Are students able to fill in the LKPD according to the instructions and complete the LKPD?		Can students present the results of their observations in front of the class?		Do students have difficulty in the PBL learning method?	
		Yes	No	Yes	No	Yes	No	Yes	No
1	Adeliza	√		√		√			√
2	Daniel Rianto	√			√	√		√	
3	Deni Kesuma	√		√		√		√	
4	Farman Zai	√			√	√		√	
5	Fincer Syahputri Zai	√		√		√			√
6	Haris Christian	√			√	√		√	
7	Miesdariah	√		√		√			√
8	M. Nur Fahrezi	√		√		√			√
9	Nur Fadilah	√		√		√			√
10	Petravita br. View	√			√	√			√
11	Rafindra	√		√		√			√
12	Aditya's rival	√		√		√			√
13	Rivaldo	√		√		√			√
14	Rizal Saputra Gea	√		√		√			√
15	Rosalina br. Sianturi	√		√		√			√
16	Siti Aminah Harahap	√		√		√			√
17	Widia Ningsih	√		√		√			√
18	Prayuga Hero	√		√		√			√
19	Yudika Siringo-ringo	√			√	√			√
	Aspect Percentage 1	$(19/19) \times 100\% = 100\%$							
	Aspect Percentage 2			$(14/19) \times 100\% = 74\%$					
	Aspect Percentage 3					$(19/19) \times 100\% = 100\%$			
	Aspect Percentage 4							$(15/19) \times 100\% = 78\%$	



Aspek 1 : Whether students can follow this lesson well ?

Aspek 2 : Whether students can fill in the LKPD according to the instructions and complete the LKPD?

Aspek 3 : Can Students present the results of their observations in front of the class ?

Aspek 4 : Whether students have difficulty in the PBL learning method ?

Based on the results above, there are several things that must be improved in the next cycle, namely innovative and creative learning media so that students' enthusiasm for learning increases. According to (Khosiyatin, 2010) Enthusiasm for learning and its relationship to the learning process also shows that to gain experience a student individually or in a group must show activeness during the learning process, not just sit and listen to the teacher's explanation, but always interact with their environment to gain this experience. There are several a philosophical view or outlook on life as well as a belief that considers life to be a form of punishment and considers freedom from life in the world to be the highest form of reward in the basic concept of learning in educational psychology. Then give praise or punishment. According to Mustaqim (2004 : 60), for this reason, reward and punishment are forms carried out by educators for actions that have been carried out by students. Punishment is imposed for bad or evil actions. Meanwhile, rewards are given for good deeds, so both remain tools for education.

Conclusion

Suggestions for teachers are that teachers can use this problem based learning model in preparing learning implementation plans as a form of effort to increase student motivation and learning outcomes. Teachers must be aware that even though this problem based learning model is a type of student-centered learning model, it The role of the teacher is still very necessary, especially to control the course of learning and ensure that dynamism occurs in the learning process. Apart from that, the role of the teacher is also still needed as a facilitator when students experience difficulties so that students do not stop at one point when students experience difficulties. Suggestions for schools are that because implementing the problem based learning model requires more learning resources than conventional learning models, the school should provide more budget to facilitate it, so that in implementing the problem based learning model it can run optimally, examples of facilities that can provided include more learning resource books.

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