IMPLEMENTATION OF THE PROBLEM BASED LEARNING MODEL TO IMPROVE STUDENT LEARNING OUTCOMES IN MIN 6 MEDAN

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Abstract

The success of the learning process is seen from the accuracy of the selected learning model so that it can achieve the learning objectives and obtain the learning outcomes optimally. The purpose of the research is to improve learning outcomes in aspects of spiritual attitudes, social attitudes, knowledge, and skills of students by implementing the Problem Based Learning learning model in Civics lessons, the subject matter of Socio-Cultural Diversity of Society. The research subject was students of the class 5-A MIN 6 Medan. The research design uses John Elliot's classroom action research model. They collected data by using tests, observations, and interviews. Data were analyzed descriptively with qualitative and quantitative approaches with the help of STATCAL software. The results of the study proved that in the first cycle, the percentage of student learning outcomes was 17.14% (6 students completed and 29 students had not completed), then increased in the second cycle with a value of 51.42% (18 students completed and 17 students did not complete).), then increased again in the third cycle with a score of 88.57% (31 students completed and four students did not complete).

***Keywords**: learning outcomes, learning model, PBL, Pancasila and civic education.*

Abstrak

Suksesnya proses pembelajaran dilihat dari ketepatan penerapan model pembelajaran yang dipilih, sehingga dapat mencapai tujuan pembelajaran dan memperoleh hasil belajar yang optimal. Tujuan penelitian untuk meningkatkan hasil belajar pada aspek sikap spiritual, sikap sosial, pengetahuan, dan keterampilan siswa dengan mengimplementasikan model pembelajaran *Problem Based Learning* pada pelajaran PPKn materi pokok tentang Keragaman Sosial Budaya Masyarakat. Subjek penelitian adalah siswa kelas 5-A MIN 6 Medan. Desain penelitian menggunakan penelitian tindakan kelas model John Elliot. Pengumpulan data menggunakan tes, observasi, dan wawancara. Data dianalisis secara deskriptif dengan pendekatan kualitatif dan kuantitatif dengan bantuan *software* STATCAL. Hasil penelitian membuktikan bahwa di siklus I persentase ketuntasan hasil belajar siswa berada pada nilai 17,14% (6 siswa tuntas dan 29 siswa belum tuntas), kemudian meningkat pada siklus II dengan nilai 51,42% (18 siswa tuntas dan 17 siswa belum tuntas), selanjutnya meningkat lagi pada siklus III dengan nilai 88,57% (31 siswa tuntas dan 4 siswa belum tuntas).

Kata-kata kunci: hasil belajar, model pembelajaran, *PBL*, PPKn.

INTRODUCTION

The issuance of Regulation of the Minister of Education, Culture, Research, and Technology of Republic Indonesia contains that students must become someone: (1) has faith and fear in God Almighty and has a noble character; (2) the character must be according to the values of Pancasila; (3) proficient in literacy and numeracy. This is important for students to do in their learning. However, the phenomenon that has occurred until now, Indonesian students are still in a crisis of competence, namely the competence of spiritual attitudes, social attitudes, knowledge, and skills.

For example, Indonesian students have low faith and morals, as was the case with students of SMKN 2 Klaten. They carried out bombings in eight different places, specifically the Surakarta and Klaten areas, on December 1, 2010- January 21, 2011 (Kristina, 2019). Meanwhile, in terms of knowledge, the focus on literacy and numeracy is shallow based on data from the PISA (Program for International Student Assessment) in 2018, the ability of Indonesian students in the aspects of reading, mathematics, and science is categorized as weak because it is at the bottom, which is 74th out of 79 countries (Hilda dkk., 2022; Lubis & Azizan, 2022).

Therefore, the three education standards in Indonesia have to be sustainable: content, process, and assessment. According to Kolb, learning should acquire a good process rather than the result (Harfitt & Chow, 2020). Teaching and learning activities must improve students' critical thinking skills based on knowledge and experience (Záhorec et al., 2021). The basis of critical thinking skills is the ability to think on a problematic reasoning power (Ulum et al., 2021).

Kolb said the teaching and learning process occurs when students carry out concrete experiential steps, reflective observation, abstract conceptualization, and iteratively active experiments (Radović dkk., 2021; Biabani & Izadpanah, 2019; Parahakaran, 2017; Falloon, 2019). Beck and Kosnik also express a similar opinion that learning is social and knowledge is based on experience and knowledge constructed by students (Hằng et al., 2017).

The success of the learning process is seen from the achievement of learning objectives that have been prepared based on the curriculum. Learning objectives can be achieved when applying the learning model appropriately and systematically. According to Lubis & Azizan (2020), the learning model is a way for teachers to carry out a lesson so that the concepts

presented can be understood by students.

The chosen learning model must refer to students' critical thinking skills through problem discovery and problem-solving. Arends stated that the learning model based on constructivist understanding accommodates student involvement in learning and authentic problem-solving (Lestari et al., 2021). A learning model that can involve students to be able to solve problems is Problem Based Learning (PBL), the result of which will have an impact on learning outcomes as stated by Yuniawan & Utomo (2022), namely one of the learning models that has an impact on learning outcomes is the problem-based learning model (PBL) (Syarifuddin & Harahap, 2021).

Problem Based Learning (PBL) is a problem-based learning model. Prof. Howard Barrows developed the PBL learning model (Lubis, Hamidah, et al., 2022).PBL is probably the learning model that was first implemented in the medical school of McMaster University in Canada in 1970, which is community-oriented and problem-based (Rusdi et al., 2022).

The steps for implementing the PBL learning model can be done by paying attention to the stages listed in table 1 (Fauzan & Lubis, 2020).

Table 1. PBL Learning Model Steps

No.	Stages	Teacher and Students Activities
1.	Orient students to problem	The teacher explains the learning objectives and the means or logistics needed. The teacher motivates students to engage in selected or prescribed actual problem-solving activities.
2.	Organizing students to study	The teacher helps the students to define and organize learning tasks related to the problems oriented in the previous stage.
3.	Guiding individual as well as group investigations	The teacher encourages students to collect appropriate information and carry out experiments in order to obtain the clarity necessary to solve the problem
4.	Develop and present work	The teacher helps students with various tasks and plans or prepares the appropriate work resulting from solving problems through reports, videos, or models.
5.	Analyze and evaluate the problem-solving process	The teacher helps students reflect on or evaluate the problem-solving process.

Furthermore, PBL has eight essential elements that must be considered to maximize

learning outcomes, as stated by A. Wilson (Widayanti, 2019). The eight elements can be seen in Figure 1.

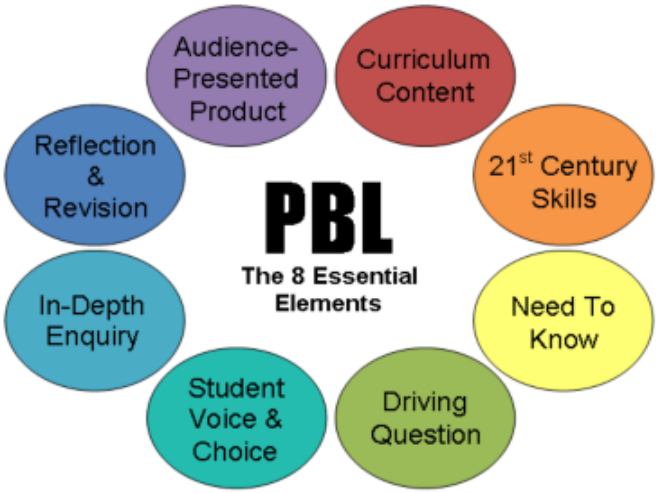


Figure 1. Essential elements of PBL

The various elements in PBL based on Figure 1, namely: (1) curriculum content; (2) 21st-century skills; (3) need to know; (4) driving questions; (5) student voice and choice; (6) in-depth inquiry; (7) reflection and revision; (8) audience presented product.

The objectives of PBL are content learning, acquisition of discipline-related heuristics, and development of problem-solving skills. PBL also includes lifelong learning objectives of independent learning, information-digging skills, collaborative and team learning, and reflective and evaluative thinking skills (Tan, 2003).In addition, the PBL objectives encourage problem-solving skills, improve independent learning and intrinsic interest in the subject matter, and advantages such as memory enhancement through activation of previous knowledge, knowledge retention and transfer (Muñoz Campos, 2017).

The PBL learning model has been tested by several researchers such as Yuafian & Astuti (2020), the results of their research prove that the improvement of science learning outcomes in fifth-grade students of SD Negeri 5 Depok Kec. Toroh Kab. Grobogan can be pursued through learning with the PBL learning model. In addition, it was also carried out by Sariastuti & Mawardi (2021), the results showed that the use of PBL with an online setting made the ability of 5th graders at SD Negeri 2 Wonoharjo, Kebumen Regency in the second semester of the 2020/2021 school year in critical thinking increased with the moderate category (Harahap, 2018).

Based on the problems described previously, it is necessary to conduct research. So this study aims to improve the learning outcomes of MIN 6 Medan students by implementing the PBL learning model in Civics lessons, the subject matter of Socio-Cultural Diversity of Society.

METHODS

The method in this research is classroom action research or commonly called Classroom Action Research (CAR). The CAR research method is reflective based on actual conditions, which are then searched for problems and followed up by concrete actions planned and measurable (Suwandi, 2009). Lecturers carry out the CAR method through self-reflection inside and outside the classroom. It is designed to improve teacher performance and student learning outcomes (Wardani, 2004).

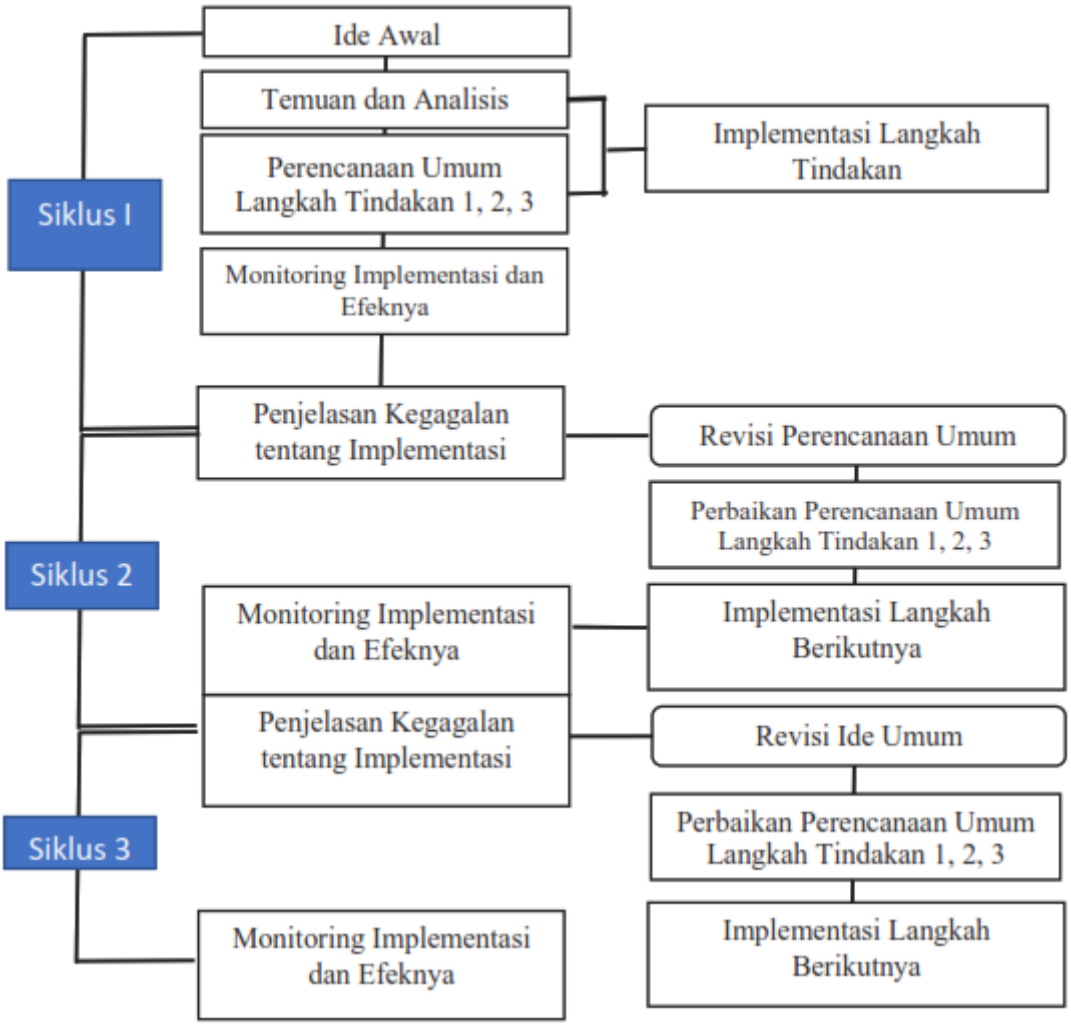
The planned action is implementing the PBL learning model to improve student learning outcomes. The research subject was class 5-A MIN 6 Medan, consisting of 24 women and 11 men. The location of the school is on Jalan Balam No. 52, Sei Sikambing Village, Medan Sunggal District, Medan City, North Sumatra. The research was carried out from September to October 2022. This research focuses on Thematic Learning, Healthy Food, the sub-theme of How the Body Processes Food (3rd, 4th, and 6th lessons), Civics lessons, and the subject matter of Socio-Cultural Diversity of Society (Harahap, 2020).

The data collected are as follows: (1) tests, which are instruments used to measure students' knowledge abilities (Arikunto, 2005). The tests in the form of limited descriptions are worked out on each cycle; (2) observation is carried out to see the research object (Salim & Syahrum, 2012). The observation in question is observing all learning activities that occur during repairs. Observations were carried out unstructured, which means that they did not use guidelines; (3) interviews were conducted with teachers and students. The interview used was unstructured, which means that they did not use guidelines (Harahap, 2019).

The data analysis techniques used in this research are namely qualitative and quantitative data analysis. Qualitative data analysis reduces data, including data selection through brief descriptions and grouping data into predetermined qualifications. Conclusions are drawn based on the results of all the data obtained from the data reduction. The conclusion of the increase or change is summarized in the reflection of a cycle I, cycle II, and the conclusion at the end of cycle III. Meanwhile, quantitative data analysis provides an overview of increasing material understanding of the Socio-Cultural Diversity of society. Quantitative data analysis was

obtained from the results of cycles I to III assisted by STATCAL software.

This research chose John Elliot's CAR model. The procedure for implementing the John Elliot CAR model can be seen in Figure 2.



Sumber: Susilo (Firdaus et al., 2022)

Figure 2. John Elliot Model Classroom Action Research Procedure

The John Elliot model CAR procedure which has been shown in Figure 2 shows that learning improvement is carried out in 3 cycles. The duration of the implementation of the three cycles ranges ≥ 1 month. The success and completeness of student learning outcomes in this study are set at a minimum of 80, this aims to increase learning. The specific criteria for scoring refer to the range of scores of 80-100 Very good), 66-79 (Good), 56-65 (adequate), 40-55 (poor), and <30 (very poor) (Arikunto, S., 2018). At the same time, classical completeness is at least 80.

RESULTS

Research result

The research was carried out in 3 meetings consisting of a cycle I, cycle II, and cycle III. The action of the PBL learning model was applied until cycle III because, at the time of the first cycle, the learning outcomes were not as expected, which was still less than 80, which consisted of an assessment of spiritual attitudes, social attitudes, knowledge, and skills. The results of the research during cycles I-III are described as follows.

Cycle I

The implementation of the first cycle will be on September 7, 2022. Student learning outcomes after applying the PBL learning model are presented in table 2.

Table 2. Frequency of Student Learning Outcomes in Cycle I

Score	Frequency	Percentage	Category
80-100	6	17,14%	Very good
66-79	21	60,00%	Good
56-65	6	17,14%	Enough
40-55	2	5,71%	Poor
< 30	0	0%	Very poor
Amount	35	100%	

The data in the first cycle based on table 2 shows that six students (17.14%) obtained learning outcomes in the very good category, 21 students (60.00%) in good category, and 6 students (17.14%) in moderate category, and 2 students (5.71%) are categorized as less. While the percentage of student learning completeness can be seen in table 3.

Table 3. Analysis of Student Learning Outcomes in Cycle I

Student Learning Completion	Number of Students	Percentage
Complete	6	17,14%
Incomplete	29	82,85%
Amount	35	100%

The analysis of student learning mastery shown in table 3 concluded that from a total of 35 students, 6 students completed (17.14%), and 29 students did not complete (82.85%). The

learning in cycle 1 has not yet reached the target of classical completeness. When the observations were made, the students were not entirely active in learning, including being active in asking questions and arguing. During interviews with students after the lesson, some students whose grades were incomplete said that the subject matter had not been understood. Therefore, it is necessary to improve cycle II by making the learning atmosphere fun so students can understand the subject more easily.

Cycle II

The implementation of the first cycle will be on September 8, 2022. The learning in the second cycle improved planning and the learning process, namely inviting students out of class, such as going to the market to observe the diversity of sellers and what was being sold. Through observation activities, students are given tasks related to the causes of price differences set by vegetable sellers. In this activity, students are invited to find problems and be able to overcome them. These activities are carried out in groups. Furthermore, an assessment is carried out, and the results are presented in table 4.

Table 4. Frequency of Student Learning Outcomes in Cycle II

Score	Frequency	Percentage	Category
80-100	18	51,42%	Very good
66-79	13	37,15%	Good
56-65	4	11,42%	Enough
40-55	0	0%	Poor
< 30	0	0%	Very poor
Amount	35	100%	

The data in cycle II based on table 4 shows that 18 students (51.42%) obtained student learning outcomes in the very good category, 13 students (37.15%) are in a good category, and 4 students (11.42%) are in the moderate category. At the same time, the percentage of student learning completeness can be seen in table 5.

Table 5. Analysis of Student Learning Outcomes in Cycle II

Student Learning Completion	Number of Students	Percentage
Complete	18	51,42%
Incomplete	17	48,57%
Amount	35	100%

The analysis of student learning mastery shown in table 5 concluded that out of a total of 35 students, 18 students were completed (51.42%), and 17 students had not completed (48.57%). Learning in cycle II has increased but has not yet reached the classical mastery target. When the observations were made, the students were already active in expressing their opinions. During interviews with students after the lesson was over, some students whose grades were incomplete said they were not enthusiastic about learning because there were no prizes. Therefore, it is necessary to improve in cycle III by making the learning atmosphere more exciting so that students can more easily understand the subject matter.

Cycle III

The implementation of the third cycle will be on September 10, 2022. The learning in the third cycle was improved in planning and the learning process. Namely, students wrote about the diversity of cultures in Indonesia, including ethnicity and musical arts and customs. Then the researchers tried to stimulate students by showing videos of wars between tribes in Indonesia and inviting students to give their opinions so that problems between warring tribes would not happen again. These activities are carried out in groups. Furthermore, an assessment is carried out and the results are presented in table 6.

Table 6. Frequency of Student Learning Outcomes in Cycle III

Score	Frequency	Percentage	Category
80-100	31	88,57%	Very good
66-79	4	11,43%	Good
56-65	0	0%	Enough
40-55	0	0%	Poor
< 30	0	0%	Very poor
Amount	35	100%	

The data in the second cycle based on table 6 shows that 31 students (88.57%) obtained learning outcomes in the very good category, and 4 students (11.43%) were in a good category. At the same time, the percentage of student learning completeness can be seen in table 7.

Table 7. Analysis of Student Learning Outcomes in Cycle III

Student Learning Completion	Number of Students	Percentage
Complete	31	88,57%
Incomplete	4	11,43%
Amount	35	100%

The results of the analysis of student learning mastery shown in table 7 concluded that out of a total of 35 students there were 31 students completed (88.57%) and 4 students not complete (11.43%). The learning in cycle III has improved according to the classical mastery target. When the observations were made, the students looked very active, including enthusiastic in expressing their opinions. At the time of interviews with students after learning was over, some students whose grades were completed said they were pleased to learn if they watched the video, especially when given gifts for those who could answer when the researcher asked the students. Meanwhile, students who are not complete state that they need time to re-understand the subject matter.

The student learning outcomes in Thematic Learning, the theme is Healthy Food, the sub-theme is How the Body Processes the Food (3rd, 4th, and 6), Civics subject, the subject matter of Socio-Cultural Diversity of Society based on the value of cycle I, cycle II, and cycle III have an increase. The results of the increase can be seen in Figure 3.

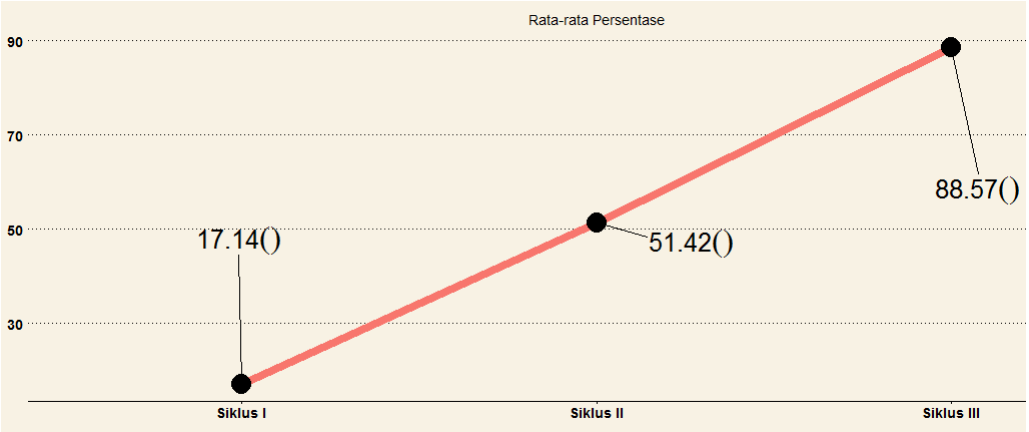


Figure 3. Classical Average of Student Learning Outcomes

Figure 3 shows that student learning outcomes have improved in each cycle. In Cycle I, the percentage of students who completed learning outcomes was at a score of 17.14% (6 students were completed and 29 students were not completed), then increased in the second cycle with a score of 51.42% (18 students completed and 17 students were not completed), then increased again in the third cycle with a score of 88.57% (31 students completed and 4 students incomplete).

Discussion

The research results have shown an increase in student learning from the aspects of spiritual attitudes, social attitudes, knowledge, and skills. This proves that there is an improvement from before. This is an expectation that students should be faithful, moral, intelligent, and skilled as required by Law No. 20 of the Year 2003 on the National Education System of Education. This means that the values of Pancasila are increasingly imbued with students. Therefore, the teaching of Pancasila and Civic Education (PPKn) to SD/MI students is expected to be able to understand, analyze, animate, and overcome the problems faced sustainably and consistently based on the ideals and goals of the Indonesian nation (Lubis, Sabri, et al., 2022). So Civics must be taught through the PBL model.

The PBL learning model can stimulate students to solve problems in their daily life by the meaning of critical thinking. Höper dkk. (2022) stated that PBL could be seen as part of context-based learning that begins with a problem focus. According to Jusmawati dkk. (2021) learning through PBL can train and develop the ability to solve problems oriented to authentic problems from students' lives to stimulate higher-order thinking skills. The emphasis is on using real-life problems as learning scenarios that have the potential to increase student motivation to learn and can encourage learning in the classroom (Ansarian & Teoh, 2018).

Rillero and Chen stated that PBL is a learning model that can integrate various subjects with meaningful experiences (Sekarwangi et al., 2021). The PBL learning model can arouse the spirit of critical thinking in students to find solutions to their problems (Naviri et al., 2021). Based on the results of Sakir & Kim (2020), research, student activities and learning outcomes in Jeneponto Regency, South Sulawesi Province, increased after implementing the PBL learning model.

According to Hung, through PBL, students can create new knowledge products (Evendi et al., 2022). The PBL model can increase student engagement (LaForce et al., 2017). Students accept the whole case of the problem and engage in a free investigation to solve the problem (Sipes, 2016). In addition, Apriani & Fitriani (2019) have proven that PBL learning improves problem-solving skills. The results of Lelapary's research (2022) also prove that the PBL learning model affects students' reasoning abilities.

PBL helps students develop soft skills by activating learning, discussing problems, and working together in groups (Sattarova et al., 2021). Similarly, Reeves & Okey stated that active

learning with problem-solving is a crucial aspect of a constructivist learning environment (McAlpine & Stothard, 2005). PBL has reconstructed the learning environment to be active and student-centered by utilizing facilitated small-group discussions and problem-solving (Wong et al., 2017). Meanwhile, research by Permatasari dkk. (2019) shows that PBL and interest in learning significantly influence the social studies learning outcomes for fourth-grade elementary school students in Polokarto District, Sukoharjo Regency. Finally, PBL is very useful to be applied in the teaching and learning process and many teachers have believed this as the results of research conducted by Al Said dkk. (2019), he found teachers in Qatar believed that PBL was very useful in this regard and reported an increase in students' motivation and engagement to learn as an improvement.

CONCLUSION

The learning outcomes of class 5-A MIN 6 Medan students on Thematic Learning, the theme of Healthy Food, the sub-theme How the Body Processes Food (3rd, 4th, and 6th learning), Civics subjects, the subject matter of Socio-Cultural Diversity of the Community have increased after it implemented the problem-based learning model.

Student learning outcomes are improved from the data obtained in each cycle. In Cycle I, the percentage of students who completed learning outcomes was at a score of 17.14% (6 students were completed and 29 students were not completed), then increased in the second cycle with a score of 51.42% (18 students completed and 17 students were not completed), then increased again in the third cycle with a score of 88.57% (31 students completed and 4 students incomplete).

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