



**THE EFFECT OF PROBLEM-BASED LEARNING MODEL ON THE
IMPROVEMENT OF STUDENTS' CRITICAL THINKING AND LEARNING
OUTCOMES IN SOCIAL SCIENCE LEARNING SUBJECT IN CLASS 5A OF SD
KRISTEN 03 EBEN HAEZER SALATIGA**

Andi Setyawan^{1*}, Krisma Widi Wardani²

^{1,2} Universitas Kristen Satya Wacana, Salatiga, Indonesia
¹andide123@gmail.com, ²krisma.widi@uksw.edu

**PENGARUH MODEL PEMBELAJARAN PROBLEM-BASED LEARNING
TERHADAP PENINGKATAN BERPIKIR KRITIS DAN HASIL BELAJAR SISWA
DALAM MUATAN PELAJARAN IPS DI KELAS 5A SD KRISTEN 03 EBEN
HAEZER SALATIGA**

ARTICLE HISTORY

Submitted:
20 April 2023
20th April 2023

Accepted:
24 Juni 2023
24th June 2023

Published:
20 Agustus 2023
20th August 2023

ABSTRACT

***Abstract:** The classroom action research in this paper aims to increase students' critical thinking and learning outcomes in Social Science learning subjects in Grade 5A of SD Kristen 3 Eben Haezer Salatiga in the second semester of the academic year 2022/2023 by implementing the Problem-Based Learning (PBL) model. The research findings reveal that the application of PBL had a significant positive impact. The student's critical thinking skills indicate improvement with the students' percentage in the high and very high categories increasing from 30% to 62% in cycle 1, and achieving 81% in cycle 2. Moreover, the implementation of PBL successfully increased the percentage of students who achieved learning achievement from 26.92% to 92.31%. There was also an improvement in the average student scores from 55 to 84.29 in cycle 2. The steps of the PBL model applied in the research of this paper included orienting students to the problem, organizing students to conduct research, guiding independent or group investigations, developing and presenting work results, as well as analyzing and evaluating problem-solving processes. Thus, it can be concluded that the PBL model is effective in increasing students' critical thinking and learning outcomes in the Social Science learning subject in Grade 5A of SD Kristen 3 Eben Haezer Salatiga. The implication of the research is that the PBL model can be utilized as an effective alternative to improve student's critical thinking and learning outcomes in Social Science learning.*

***Keywords:** problem-based learning, learning outcomes, critical thinking, elementary students*

Abstrak: Penelitian tindakan kelas pada artikel ini bertujuan untuk meningkatkan berpikir kritis dan hasil belajar siswa pada muatan pelajaran IPS kelas 5A SD Kristen 3 Eben Haezer Salatiga semester II tahun pelajaran 2022/2023 dengan menerapkan model Problem-Based Learning (PBL). Temuan penelitian menunjukkan bahwa penerapan PBL memberikan dampak positif yang signifikan. Kemampuan berpikir kritis siswa mengalami peningkatan dengan presentase kemampuan dalam kategori tinggi dan sangat tinggi meningkat dari 30% menjadi 62% pada siklus 1, dan mencapai 81% pada siklus 2. Selain itu, penerapan PBL juga berhasil meningkatkan presentase siswa yang mencapai ketuntasan hasil belajar dari 26,92% menjadi 92,31%. Terjadi pula peningkatan rata-rata nilai siswa dari 55 menjadi 84,29 pada siklus 2. Langkah-langkah model PBL yang diterapkan dalam penelitian pada artikel ini meliputi orientasi siswa pada masalah, mengorganisasi siswa untuk meneliti, membimbing penyelidikan secara mandiri atau kelompok, mengembangkan dan mempresentasikan hasil kerja, serta menganalisis dan mengevaluasi proses mengatasi masalah. Dengan demikian, dapat disimpulkan bahwa model PBL efektif untuk meningkatkan berpikir kritis dan hasil belajar siswa pada muatan pelajaran IPS di kelas 5A SD Kristen 3 Eben Haezer Salatiga. Implikasi dari penelitian adalah bahwa model PBL dapat digunakan sebagai alternatif yang efektif dalam meningkatkan berpikir kritis dan hasil belajar siswa dalam pembelajaran IPS.

Kata Kunci: pembelajaran berbasis masalah, hasil belajar, berpikir kritis, siswa sekolah dasar

CITATION

Setyawan, Andi & Wardani, K,W (2023). The Effect of Problem-Based Learning Model on the Improvement of Students' Critical Thinking and Learning Outcomes in Social Science Learning Subject in Class 5A of SD Kristen 03 Eben Haezer Salatiga. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, 12 (4), 945-956. DOI: <http://dx.doi.org/10.33578/jpfkip.v12i4.9785>.

INTRODUCTION

Education is a deliberate and planned effort to optimize the learning process and learning environment so that students can develop their potentials (Ariyanti, 2016). In 21st century education in Indonesia, there is an increasing recognition of the importance of developing critical thinking skills in students. According to Mahsun et al. (2021), 21st century education emphasizes the development of critical thinking skills as part of preparing students to face the demands of a complex and ever-evolving world. An education that is oriented towards critical thinking can help students develop the ability to critically analyze information, evaluate arguments rationally, and make evidence-based inferences.

Critical thinking is an important intellectual ability in understanding and critically evaluating information. According to Abrami et al. (2021), critical thinking involves the ability to analyze deeply, carefully evaluate arguments, and make rational inferences based on available evidence. It also includes the ability to recognize and avoid cognitive biases that can influence decision-making processes (Stanovich & West, 2021). Critical thinking enables individuals to develop a deeper understanding of a problem or issue and make decisions based on solid evidence and logic. In today's rich and complex information era, critical thinking has become an increasingly important skill in facing challenges and making informed decisions (Bailin, 2019).

Critical thinking has a significant impact on students' learning outcomes. Students' critical thinking abilities are positively related to better academic

achievements in various subjects (Yuniarti et al., 2021). Students with higher critical thinking skills tend to have better analytical abilities, can critically evaluate information, and generate deeper understanding. Furthermore, research by Ariyani and Sulistiyani (2018) shows that learning that promotes critical thinking can enhance logical thinking, creativity, and problem-solving skills of students in Indonesia. These improved learning outcomes are supported by teaching approaches that encourage students to develop analytical, skeptical, and reflective thinking abilities (Subekti, 2020). Thus, critical thinking plays a crucial role in improving students' learning outcomes.

In the context of education, learning outcomes are highly important. Learning outcomes serve as tangible evidence of students' understanding of concepts and the required skills (Ine, M.E., 2015). Learning outcomes can be measured through various forms of assessment, such as tests, quizzes, or assignments. Good learning outcomes indicate that students have successfully understood the taught material and can apply it in their daily lives. Conversely, low learning outcomes suggest that students have not fully grasped the taught material and efforts need to be made to enhance their understanding and mastery of the subject matter. Therefore, efforts need to be made to improve students' learning outcomes through appropriate learning models, strategies, and approaches that accommodate students' needs and characteristics.

By implementing appropriate teaching methods, strategies, and approaches that accommodate students' needs and characteristics, it is expected to create an

effective and motivating learning environment for students (Suparsawan et al., 2020). This can help students achieve optimal learning outcomes and prepare them to face future challenges. According to Syaparuddin (2020:30), learning models and strategies are techniques or methods used by teachers or educators to ensure that students acquire optimal understanding and knowledge. Some effective learning models and strategies include active learning, problem-based learning, cooperative learning, and project-based learning. Active learning involves students in the learning process, allowing them to learn actively and engage directly in learning activities. According to Zubaidah (2016), problem-based learning enables students to learn through solving complex problems, thus acquiring a deeper understanding of the concepts being studied. Appropriate learning models and strategies are crucial in enhancing the effectiveness of social studies education and motivating students to learn actively.

Social Studies (IPS) is one of the compulsory subjects taught in elementary schools (SD) based on the Ministry of Education and Culture Regulation No. 22 of 2016 on Content Standards for Elementary and Secondary Education. This regulation emphasizes that the objective of IPS education in elementary schools is to develop students' understanding of society, social life, history, geography, and government in Indonesia. IPS education in elementary schools should be conducted comprehensively and integratively so that students can develop critical thinking, communication, and participation skills in social and political aspects of society. Therefore, IPS teachers in elementary schools need to understand the content standards and pay attention to important aspects of IPS education, such as the development of critical thinking skills and students' understanding of Indonesian society. Thus, IPS education in elementary schools can help students understand various social and political

concepts more deeply and apply them in their daily lives.

Based on observations at SD Kristen 3 Eben Haezer Salatiga, there is a low level of critical thinking ability among students in thematic learning, particularly in IPS subjects. Limited time and students' lack of interest in memorization-based materials are the main factors. This results in low learning outcomes, with an average score of 55 compared to the minimum passing grade (KKM) of 72. Only 7 students or 27.92% have achieved satisfactory learning outcomes, while 19 students or 73.08% have not yet met the criteria. Reflection and adjustment of teaching models are necessary to improve students' understanding and actively engage them in the learning process. Further steps need to be taken to enhance students' critical thinking skills and their learning outcomes in IPS subjects.

The alternative solution to the problem requires the implementation of a learning model that enables students to actively engage in the learning process, so they do not rely on less interactive learning methods and the learning objectives in the classroom can be achieved. Problem-Based Learning (PBL) is a learning model that emphasizes learning through problem-solving (Marsinah, 2019). In this model, students are encouraged to identify and solve problems related to the subject matter being studied. PBL enables students to think critically, creatively, and independently in solving the problems they encounter. In PBL, the teacher serves as a facilitator, guiding students in developing their thinking skills and problem-solving abilities (Daniel, 2017). The PBL model is highly effective in enhancing critical thinking skills, collaboration skills, and problem-solving skills. Additionally, this model encourages students to learn independently and develop self-directed learning skills, which are highly valuable in the current era of globalization. Therefore, PBL is strongly recommended as a learning model in modern education.

Based on the background description, the purpose of this article is to examine the implementation of the Problem-Based Learning Model in an effort to enhance critical thinking skills in the 5A class of SD Kristen 3 Eben Haezer Salatiga. The improvement in students' critical thinking abilities can be assessed based on the learning outcomes obtained after the implementation of the learning process. Furthermore, this article aims to outline the steps involved in implementing the Problem-Based Learning model to enhance the learning outcomes in IPS for the students of class 5A in SD Kristen 03 Eben Haezer.

THEORETICAL SUPPORT

Learning Outcomes

Learning outcomes are the results achieved by students after undergoing the learning process in a specific subject or topic (Suwardi 2016). Learning outcomes include the knowledge, skills, and understanding acquired by students during the learning process and can be measured using various evaluation models such as exams, assignments, projects, and so on. Good learning outcomes indicate that students have successfully achieved the learning objectives and are able to apply the knowledge and skills they have learned in real-life situations (Astari 2017). Furthermore, good learning outcomes can also provide an indication of the effectiveness and efficiency of the learning process.

Objective tests are tests designed to provide clear and objective answers, which are either correct or incorrect (Yuniawatika et al., 2021). This type of test usually consists of multiple-choice questions, true or false questions, or complete sentences. Objective tests are very useful for measuring someone's knowledge or understanding of a particular subject because they provide measurable and reliable results.

Multiple-choice tests are one of the most commonly used types of objective tests in education and assessment. These tests consist of a number of questions that contain several

answer options, where participants are required to choose one or more correct answers from the available options (Rosyidi 2020). The correct answers are referred to as the "answer key". Multiple-choice tests are used to measure participants' understanding of specific concepts and are often used in academic exams, job qualification tests, psychological tests, and so on. These tests are relatively easy and quick to complete, and they provide accurate results in a short amount of time.

Problem-Based Learning (PBL) Model

Arends (2012: 396) explains that the essence of problem-based learning consists of presenting authentic and meaningful problem situations to students that can serve as a foundation for investigation and inquiry. PBL provides opportunities for students to develop critical thinking, collaborate, and solve problems through discussions and authentic problem-solving. According to Trianto (2011: 67), PBL or Problem-Based Learning is a learning model that demands learners to ask questions and seek answers to problems or issues that exist in their surroundings. In the PBL model, students are confronted with real-world situations and have the opportunity to develop problem-solving skills, critical thinking abilities, and social skills. PBL is designed to promote active student engagement in the learning process and build a deeper conceptual understanding. In PBL, the teacher acts as a facilitator, guiding students in the learning process and providing constructive feedback. Furthermore, Suprihatiningrum (2014: 216) states that Problem-Based Learning (PBL) is an approach to learning that emphasizes problem-solving as the main foundation in the teaching and learning process. In this model, students are exposed to real-life situations or problems relevant to their lives. Through the problem-solving process, students actively engage in finding creative solutions and applying the knowledge and skills they have learned. Additionally, PBL also encourages students to develop critical

thinking, collaboration, and communication skills in order to face real-world challenges.

Based on the perspectives of Arends, Trianto, and Suprihatiningrum, it can be concluded that the Problem-Based Learning (PBL) instructional model comprises the following components:

1. Learning system
2. Deviation from learning problems
3. Scientific study to solve the problems
4. Students knowing how to construct their own knowledge.

From these components, it can be concluded that Problem-Based Learning (PBL) is a student-centered instructional model. In PBL, students are encouraged to actively solve given problems using their own ideas and concepts. This learning model emphasizes students' ability to construct and reconstruct knowledge and experiences in the learning process. PBL also directs students to be sensitive to the problems they encounter in their daily lives and encourages them to develop independent problem-solving skills. In PBL, the teacher plays the role of a facilitator who helps students understand the given problem and guides them through the problem-solving process.

The syntax of Problem-Based Learning presented by Arends (2012) in Learning to Teach Seventh Edition is as follows (Arends, 2012: 411):

1. Phase 1: Providing orientation about the problem to students The teacher introduces a complex and authentic problem or challenge to the students. This problem should challenge students to solve it independently or in groups.
2. Phase 2: Organizing students for investigation After introducing the problem, the teacher guides students in understanding the problem, considering the necessary information, and asking relevant questions.
3. Phase 3: Assisting in independent or group investigation Students conduct research and exploration independently or in groups to gather the required information to solve the

problem. The teacher can provide guidance and resources to assist students in this process.

4. Phase 4: Developing and presenting the work outcomes After conducting research and exploration, students present their work outcomes to the class or group. The teacher provides constructive feedback and guides students in reflecting on their learning process.
5. Phase 5: Analyzing and evaluating the problem-solving process Providing feedback on students' understanding and use of learning resources, as well as helping students expand their understanding and resolve the researched problem or situation.

The following are student activities in the Problem-Based Learning syntax according to Arends (2012: 411):

1. Reading the given case or problem.
2. Identifying the problem to be solved.
3. Developing a plan or strategy to solve the problem.
4. Gathering the necessary information.
5. Solving the problem using the gathered information.
6. Reporting the problem-solving outcomes to the group or class.
7. Receiving feedback from the teacher and classmates about the provided solution.
8. Reflecting on the learning process and the given solution.

METHOD

This research methodology utilizes the Classroom Action Research (CAR) approach, with the aim of enhancing critical thinking and student learning outcomes in the social studies subject. It also explains the steps in implementing the Problem-Based Learning model to improve the social studies learning outcomes of 5A students at SD Kristen 03 Eben Haezer. The study was conducted at SD Kristen 3 Eben Haezer, located at Jl. Jendral Sudirman N0. 111B, Salatiga. The research subjects were 26 fifth-grade students of SD Kristen 3 Eben Haezer Salatiga, consisting of

15 male students and 11 female students.

The CAR consists of four phases: planning, action, observation, and reflection. The planning phase involves problem identification, goal setting, action plan formulation, strategy selection, and success indicator determination (Aqib & Chotibuddin, 2018). The action phase includes implementing the action plan and data collection. The observation phase entails observing the conducted actions, measuring learning outcomes, and analyzing data. Finally, the reflection phase evaluates the success of the actions taken and the learning derived from the experience, providing input for subsequent action planning. These steps can be carried out in cycles, where after the reflection phase, the planning phase for the next cycle can be initiated, and so on. By employing this model, it is expected that student learning outcomes in social studies will improve, thus meeting the Minimum Mastery Criteria (KKM) set forth.

The data collection instrument used in this study is an objective test used to measure student learning outcomes and assess their understanding of the material. Before developing the test instrument, a test blueprint was prepared, which contains the description of competencies and topics to be assessed to measure students' abilities after being taught using the Problem-Based Learning model. The test technique employed here is used to obtain learning outcomes in the "Our Friendly Environment" theme in cycle 1 and cycle 2. The test items provided to students are in the form of multiple-choice questions.

The pilot testing of the instruments used in this research employed the applied test technique to assess validity and reliability, which means the pilot testing was conducted concurrently with the actual research implementation (Muhassanah, 2020). Thus, applied testing is a technique for assessing validity and reliability by collecting data only once, and the pilot test results are immediately used to test the hypothesis.

Observation is one of the methods

used in measuring students' critical thinking. To conduct this observation, a rubric adapted from Facione (2011) was employed, consisting of several important indicators. One of them is analysis, which emphasizes students' ability to identify relationships between elements of information and recognize underlying patterns or structures. Evaluation is another important indicator that involves students' ability to assess arguments, claims, or opinions based on relevant criteria and standards. The ability to make inferences is also measured, i.e., students' ability to draw conclusions or infer something based on the available information. Explanation, as another indicator, tests students' ability to express understanding and reasoning clearly and logically. Lastly, reasoning is an indicator that involves students' ability to use logical and critical reasoning to solve problems or make decisions. All of these indicators serve as important criteria for assessing students' critical thinking abilities.

This study applies Problem-Based Learning to measure critical thinking and student learning outcomes in thematic learning, with a target minimum mastery percentage of 80% and a minimum score of 72. The collected data was then analyzed using comparative descriptive analysis, comparing the conditions in the pre-cycle, cycle 1, and cycle 2 to determine the research findings.

RESULTS AND DISCUSSION

The implementation of classroom action research using Problem-Based Learning has proceeded according to the planned learning design. There has been an improvement in student learning outcomes in the pre-cycle, cycle 1, and cycle 2 with the application of the Problem-Based Learning model to the students of 5A class at SD Kristen 3 Eben Haezer Salatiga in the second semester of the academic year 2022/2023. The following are the student learning outcomes for the theme "Our Friendly Environment" (IPS subject) in the initial condition, cycle 1, and cycle 2:

Table 1. Comparison of Learning Mastery Achievement in Pre-Cycle, Cycle 1, and Cycle 2

No.	Category	Value Interval	Pre-Cycle		Cycle 1		Cycle 2	
			Frequency	%	Frequency	%	Frequency	%
1.	Incomplete	00.00-71.99	19	73.08%	8	30.77%	2	7.69%
2.	Completeness	72.00-100.00	7	26.92%	18	69.23%	24	92.31%
	Sum		26	100%	26	100%	26	100%
	Lowest Score		38		45		50	
	Highest Score		92		100		100	
	Average		55		77		84.29	

From the table above, it can be observed that there has been an increase in the number of students who have achieved satisfactory learning outcomes. It is evident that in the pre-cycle, there were 7 students who achieved satisfactory results and 19 students who did not. In cycle 1, there were 18 students who achieved satisfactory results, and 8 students who did not. In cycle 2, there were 24 students who achieved satisfactory results and 2 students who did not. The improvement in student achievement can be seen in cycle 1, where the percentage of students who achieved satisfactory results was 69.23%, and in cycle 2, the percentage increased to 92.31%. This indicates an increase in student achievement after the research was conducted in cycle 2 by 23.08%. Additionally, the average score of the students in class 5A also increased. The initial

score of 55 improved to 77 in cycle 1 and further increased to 84.29 in cycle 2. Based on the data in the table, the performance indicators that were set have been achieved as the number of students who achieved satisfactory results reached 92.31%, exceeding the targeted achievement indicator of 80% of the total number of students. This research aligns with the findings of Bareno, D. P. (2021), which showed a significant increase in the average scores and the percentage of students who achieved satisfactory results.

In addition to improving student learning outcomes throughout the implementation of the learning process in cycle 1 and cycle 2, this research aimed to evaluate the improvement in students' critical thinking skills. The results of the research can be seen in the following table:

Table 2. Summary of Students' Critical Thinking

Critical Thinking Categories	Pre-Cycle		Cycle 1		Cycle 2	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Very High	0	0%	2	8%	7	27%
High	10	38%	14	54%	14	54%
Moderate	12	46%	9	35%	5	19%
Low	3	12%	1	4%	0	0%
Very Low	1	4%	0	0%	0	0%
Total	26		26		26	
Success Rate		30%		62%		81%

Based on the table above, there is evidence indicating an improvement in

students' critical thinking abilities in class 5A of SD Kristen 3 Eben Haezer Salatiga. In the

initial condition, the percentage of students with high and very high critical thinking abilities was 30%. After going through cycle 1, the percentage of students with high critical thinking abilities increased to 62%. Furthermore, in cycle 2, the percentage of students with high critical thinking abilities reached 81%. Thus, it can be said that there has been a significant improvement in students'

critical thinking abilities. More than 80% of the students experienced an improvement in the high category of critical thinking, with 14 students accounting for 54%, and in the very high category, 7 students accounting for 27%. This can also be observed through the comparison of indicators in the table, which demonstrates the improvement in critical thinking abilities as shown below.

Table 3. Average Scores of Critical Thinking Skills Indicators

Indicator	Pre-cycle	Cycle 1	Cycle 2	Average
Interpretation The ability to interpret information accurately and understand the meaning contained in the given text or data.	65%	71%	81%	72%
Analysis The ability to identify relationships between information elements and recognize underlying patterns or structures.	53%	64%	76%	64%
Evaluation The ability to evaluate arguments, claims, or opinions based on relevant criteria and standards.	55%	68%	79%	67%
Inference The ability to make inferences or draw conclusions based on available information.	66%	74%	82%	74%
Explanation The ability to express understanding and reasoning clearly and logically.,	54%	65%	72%	64%
Reasoning The ability to use logical and critical reasoning to solve problems or make decisions.	67%	78%	86%	77%

From the data presented in the table, it can be concluded that students' critical thinking skills have improved in each indicator. The average score percentages are as follows: interpretation indicator at 72%, analysis indicator at 64%, evaluation indicator at 67%, inference indicator at 74%, explanation indicator at 64%, and reasoning indicator at 77%. This indicates an improvement in students' critical thinking abilities in each observed aspect.

Discussion

The results of the classroom action research conducted in class 5A of SD Kristen 3 Eben Haezer Salatiga show that the Problem-

Based Learning (PBL) model can make a positive contribution to students' critical thinking skills and learning outcomes in the subject of IPS. This study reveals a significant increase in the percentage of students' critical thinking abilities in the high and very high categories by 30%. After going through cycle 1, the percentage of high-level critical thinking skills increased to 62%, and in cycle 2, it reached 81%. More than 80% of students experienced an improvement in their high-level (54%) and very high-level (27%) critical thinking abilities. Additionally, there was an increase in the percentage of students who achieved learning mastery in each cycle. The mastery level increased from 26.92% to

69.23% in cycle 1 and reached 92.31% in cycle 2. The average student grades also showed improvement from 55 at the initial condition to 77 in cycle 1 and 84.29 in cycle 2. These research findings indicate that the use of the PBL model in thematic teaching of IPS content can help students achieve learning mastery and improve their average grades. Therefore, the PBL learning model can be considered an effective alternative in enhancing students' learning outcomes in IPS content.

Fifth-grade students possess social skills such as teamwork and a positive attitude towards learning (Marlina, 2021). Additionally, fifth-grade students begin to demonstrate greater maturity and autonomy in making decisions and completing academic tasks. Problem-Based Learning (PBL) is a learning model that emphasizes problem-solving. The use of the PBL model in teaching helps students develop conceptual understanding and critical thinking skills (Vera, K., & Wardani, K. W., 2018). In this study, critical thinking skills were measured through aspects such as interpretation, analysis, evaluation, inference, reasoning, and communication. The results showed a significant improvement in students' critical thinking skills after undergoing the learning process using the problem-based learning model with audiovisual aids. This research contributes significantly to the development of a learning model that can enhance students' critical thinking skills at the elementary school level.

The detailed implementation of the Problem-Based Learning (PBL) model can enhance students' learning interest, motivation, and participation. The PBL model in teaching helps students develop conceptual understanding and problem-solving abilities (Yuniawardani & Mawardi, 2018, pp. 24-32). The research conducted showed that the implementation of the Problem-Based Learning (PBL) model improved learning outcomes in fourth-grade students at SD N

Gendongan 03. The improvement was observed in each cycle. The research findings were supported by the increase in the number of students who achieved learning mastery: from 24 students (66.7%) in the initial condition to 28 students (77.8%) in cycle 1 and further increased to 31 students (86.1%) in cycle 2. It can be concluded that the research was successful.

In line with the aforementioned research, my study on the implementation of the PBL model found that learning became more engaging as students learned in groups and were able to think critically in solving problems presented by the teacher. Arends (2012:411) identifies five stages in PBL: orientation, organization, inquiry, development, and analysis. The syntax of Problem-Based Learning is as follows: Phase 1 provides orientation about the problem to the students, Phase 2 organizes students for investigation, Phase 3 assists in independent or group-based inquiry, Phase 4 involves developing and presenting the work, and Phase 5 entails analyzing and evaluating the problem-solving process. Furthermore, Suprihatiningrum (2014:216) suggests that PBL is a learning approach that begins with presenting a problem to the students, followed by a process of information search that is more student-centered. As a result, students showed increased enthusiasm in learning IPS compared to the initial condition, actively engaging in questioning and discussing to solve problems. Students who have mastered the material assisted those who have not.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the action research conducted in class 5A at SD Kristen 3 Eben Haezer Salatiga, it can be concluded that: 1) The implementation of the Problem-Based Learning model increases the percentage of students' high and very high-level critical thinking skills, with an increase from 30% to 62% in cycle 1, and reaching 81% in cycle 2.

More than 80% of the students experienced an improvement in high-level (54%) and very high-level (27%) critical thinking skills. 2) The implementation of the Problem-Based Learning model improves the learning outcomes of students in class 5A at SD Kristen 3 Eben Haezer Salatiga. This is evidenced by the increase in the percentage of students achieving learning mastery. The improvement occurs in each cycle, starting from the initial condition of low learning mastery, which was 26.92%. Then, in cycle 1, it increased to 69.23%, and in cycle 2, it further increased to 92.31%. Not only that, there is also an increase in the average grades of the students in class 5A, from 55 at the initial condition, to 77 in cycle 1, and further increased to 84.29 in cycle 2.

This study proves that the implementation of the steps of the Problem-Based Learning (PBL) model can improve students' learning outcomes in the subject of Social Studies in class 5A at SD Kristen 3 Eben Haezer Salatiga, second semester of the academic year 2022/2023, with the following steps: 1) Orienting students to the problem; 2) Organizing students for investigation; 3) Guiding independent or group investigations; 4) Developing and presenting the work results; 5) Analyzing and evaluating the problem-solving process.

Based on the findings and conclusions of the researcher's study, the researcher provides the following suggestions to teachers for implementing the Problem-Based Learning (PBL) model in Social Studies teaching in 5th grade of elementary school. This model can help improve students' learning outcomes and motivate them to actively and independently engage in learning. Furthermore, teachers need to pay attention to the steps in implementing the PBL model, such as orienting students to the problem, organizing students for investigation, guiding independent or group investigations, developing and presenting the work results, as well as analyzing and evaluating the problem-solving process. With

the appropriate implementation of the PBL model, it is expected that students can be more active and creative in learning, leading to optimal learning outcomes.

ACKNOWLEDGMENT

I express my gratitude to Almighty God for granting me the opportunity and good health to pursue knowledge and complete this journal writing. I would like to extend my sincere thanks to Mrs. Krisma Widi Wardani, M.Pd, as the supervisor, Mrs. Ria Triastuti, M.Pd, as the mentor teacher, and my colleagues in the PPG Prajabatan program. I am immensely grateful for the support, guidance, and motivation provided throughout the process of writing this article. May the results of this research be beneficial to the field of education and contribute positively to improving the quality of teaching and learning. I would also like to thank the entire community of SD Kristen 3 Eben Haezer Salatiga for their support and active involvement in the research, enabling me to complete this journal.

REFERENCES

- Abrami, P. C., Bernard, R. M., Borokhovski, E., Wade, C. A., Surkes, M. A., Tamim, R., & Zhang, D. (2021). Strategies for teaching students to think critically: A meta-analysis. *Review of Educational Research*, 91(3), 423-469.
- Andi Prastowo. (2013). *Panduan Kreatif Membuat Bahan Ajar*. Inovatif. Yogyakarta: Diva Press.
- BSNP. (2010). *Laporan BSNP 2010*. Jakarta: BSNP. Balitbang.
- Anshori, S. (2016). Kontribusi ilmu pengetahuan sosial dalam pendidikan karakter. *Edueksos Jurnal Pendidikan Sosial & Ekonomi*, 3(2).
- Aqib, Z., & Chotibuddin, M. (2018). *Teori dan Aplikasi Penelitian Tindakan Kelas:(PTK)*. Deepublish.

- Arends, R. (2012). *Learning to Teach Seventh Edition*. McGraw Hill Companies, Inc., 1221 Avenue of the Americas, New York, NY 10020.
- Ariyani, F., & Sulistiyani, E. (2018). Efektivitas penggunaan model problem-based learning dalam meningkatkan keterampilan berpikir kritis siswa. *Jurnal Inovasi Pendidikan IPA*, 4(2), 215-225.
- Ariyanti, T. (2016). Pentingnya Pendidikan Anak Usia Dini Bagi Tumbuh Kembang Anak The Importance Of Childhood Education For Child Development. *Dinamika Jurnal Ilmiah Pendidikan Dasar*, 8(1).
- Astari, T. (2017). Pengembangan lembar kerja siswa (LKS) berbasis pendekatan realistik untuk meningkatkan hasil belajar siswa SD kelas IV. *Jurnal Pelangi*, 9(2).
- Bailin, S. (2019). Critical thinking and education. In *The Palgrave Handbook of Critical Thinking in Higher Education* (pp. 3-26). Palgrave Macmillan.
- Bareno, D. P. (2021). Penerapan Model Problem Based Learning Untuk Meningkatkan Hasil Belajar Pembelajaran Tematik Terpadu Kelas IV. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, 10(4), 796-802.
- Daniel, F. (2017). kemampuan berpikir kritis siswa pada implementasi Project Based Learning (PJBL) berpendekatan saintifik. *JPMI (Jurnal Pendidikan Matematika Indonesia)*, 1(1), 7-13.
- Dewi, S. K., & Sudaryanto, A. (2020). Validitas dan reliabilitas kuisioner pengetahuan, sikap dan perilaku Pencegahan Demam Berdarah. *Prosiding Seminar Nasional Keperawatan Universitas Muhammadiyah Surakarta 2020*.
- Facione, P. A. (2011). Critical thinking: What it is and why it counts. *Insight assessment*, 1(1), 1-23.
- Ghozali, I. (2017). Pendekatan scientific learning dalam meningkatkan prestasi belajar siswa. *PEDAGOGIK: Jurnal Pendidikan*, 4(1).
- Ine, M. E. (2015). Penerapan pendekatan scientific untuk meningkatkan prestasi belajar siswa pada mata pelajaran ekonomi pokok bahasan pasar. In *Prosiding Seminar Nasional* (Vol. 9, pp. 269-285).
- Jamil Suprihatiningrum. (2014). *Strategi Pembelajaran*. Yogyakarta: Ar-Ruzz Media.
- Marlina, Y. (2021). Peningkatan Hasil Belajar IPS melalui Model Guided Discovery dalam Materi Kerja Sama pada Siswa Kelas V SD Negeri 133 Halmahera Selatan. *JURNAL PENDAS (Pendidikan Sekolah Dasar)*, 3(1), 53-60.
- Masrinah, E. N., Aripin, I., & Gaffar, A. A. (2019, October). *Problem-Based Learning (PBL)* untuk meningkatkan keterampilan berpikir kritis. In *Prosiding Seminar Nasional Pendidikan* (Vol. 1, pp. 924-932).
- Muhassanah, N. A. (2020). Pengaruh Kepemimpinan Kepala Sekolah Terhadap Kinerja Guru Sekolah Dasar Di Banyumas. *utile: Jurnal Kependidikan*, 6(1), 66-77.
- Pemerintah Republik Indonesia. (2016) *Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia No. 22 Tahun 2016 Tentang Standar Proses Pendidikan Dasar dan Menengah*. Jakarta.
- Pemerintah Republik Indonesia. (2016). *Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia No. 24 Tahun 2016 Tentang Kompetensi Inti dan Kompetensi Dasar Pelajaran Pada Kurikulum 2013 Pada Pendidikan Dasar dan Pendidikan Menengah*. Jakarta.
- Rosyidi, D. (2020). Teknik dan Instrumen Asesmen Ranah Kognitif. *Tasyri:*

- Jurnal Tarbiyah-Syariah-Islamiah*, 27(1), 1-13.
- Stanovich, K. E., & West, R. F. (2021). Thinking scientifically about critical thinking. *Perspectives on Psychological Science*, 16(4), 718-724.
- Subekti, A. S. (2020). Penerapan model problem based learning untuk meningkatkan kemampuan berpikir kritis siswa pada mata pelajaran geografi. *Jurnal Pendidikan Geografi*, 25(2), 116-130.
- Sulastri, S., Imran, I., & Firmansyah, A. (2015). Meningkatkan hasil belajar siswa melalui strategi pembelajaran berbasis masalah pada mata pelajaran IPS di kelas V SDN 2 Limbo Makmur Kecamatan Bumi Raya. *Jurnal Kreatif Online*, 3(1).
- Suparsawan, I. K., & SD, S. P. (2020). Kolaborasi Pendekatan Saintifik dengan Model Pembelajaran STAD Geliatkan Peserta Didik. *Tata Akbar*.
- Suwardi, S., Firmiana, M. E., & Rohayati, R. (2016). Pengaruh penggunaan alat peraga terhadap hasil pembelajaran matematika pada anak usia dini. *Jurnal Al-Azhar Indonesia Seri Humaniora*, 2(4), 297-305.
- Syaparuddin, S., Meldianus, M., & Elihami, E. (2020). Strategi pembelajaran aktif dalam meningkatkan motivasi belajar pkn peserta didik. *Mahaguru: Jurnal Pendidikan Guru Sekolah Dasar*, 1(1), 30-41.
- Vera, K., & Wardani, K. W. (2018). Peningkatan keterampilan berfikir kritis melalui model problem based learning berbantuan audio visual pada siswa kelas IV SD. *Jurnal Riset Teknologi dan Inovasi Pendidikan (JARTIKA)*, 1(2), 33-45.
- Wardani, Naniek Sulistya dan Slameto. 2012. *Evaluasi Proses dan Hasil Belajar*. Salatiga: Widya Sari Press.
- Yulianti, E., & Gunawan, I. (2019). Model pembelajaran *Problem-Based Learning (PBL)*: Efeknya terhadap pemahaman konsep dan berpikir kritis. *Indonesian Journal of Science and Mathematics Education*, 2(3), 399-408.
- Yuniarti, R., Widodo, A., & Sujatmika, S. (2021). Pengaruh kemampuan berpikir kritis terhadap hasil belajar siswa SMA di Surakarta. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, 6(2), 204-212.
- Yuniawardani, V., & Mawardi, M. (2018). Peningkatan hasil belajar pada pembelajaran matematika dengan model problem based learning kelas IV SD. *Jurnal Riset Teknologi dan Inovasi Pendidikan (JARTIKA)*, 1(2), 24-32.
- Yuniawatika, Y., Manggala, I. S. A., & Rahmasari, F. D. (2021). *Penyusunan Instrumen Tes Dan Pembuatan Online Quiz Bagi Guru*. Bayfa Cendekia Indonesia.