

Improvement of Student Motivation and Learning Outcomes in 3rd Grade Students of Bantul Elementary School on the Theme 'Praja Muda Karana' using the Problem-Based Learning Model

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Abstract: This study aims to determine whether the use of the problem-based learning model can improve the motivation and learning outcomes of 3rd-grade students at Bantul Elementary School. The hypothesis of this research is that the use of the problem-based learning model can enhance student motivation and learning outcomes on the theme "Praja Muda Karana" in the 3rd grade of Bantul Elementary School. This study employs a classroom action research (PTK) design, with the research subjects being 24 students from the 3rd grade at Bantul Elementary School. The research focuses on learning motivation, learning outcomes, and the problem-based learning model as the objects of the study. Data collection techniques include observation through questionnaires, tests (evaluations), and documentation. The analysis of student learning motivation data using questionnaires is done by calculating percentages, while learning outcomes are based on the scores obtained in each learning cycle. The results of the study indicate that the use of the Problem-Based Learning model can improve both motivation and learning outcomes on the theme "Praja Muda Karana" for 3rd-grade students at Bantul Elementary School. Motivation improvement is observed with an average percentage of 53% in the initial cycle, 75% in cycle I, and 89% in cycle II. Meanwhile, the enhancement in learning outcomes shows an average percentage of 58% in the pre-cycle, 75% in cycle I, and 85% in cycle II.

Keywords: Learning motivation, learning outcomes, Problem-Based Learning.

Introduction

High-quality human resources in the 21st century are considered invaluable assets in nation-building. Education plays a crucial role in developing intellectual knowledge to shape quality and character-driven human resources, as stated by the Tim Dosen Ketamansiswaan (2013:32). This aligns with the purpose of education, which aims to cultivate students into independent individuals, both in mind and spirit, with noble moral values and physical health, who can become valuable and responsible members of society contributing to the well-being of the nation, homeland, and humanity in general. Elementary School (SD) is one of the formal educational institutions that requires a good and structured education system to help students develop their abilities and potentials through various subjects taught within thematic learning. Thematic learning involves the integration of several subjects, including Bahasa Indonesia, Social Studies, Mathematics, Natural Sciences, and Civics Education. Based on observations and interviews conducted by the researcher with 3rd-grade teachers at Elementary School Bantul, it was found that students' learning motivation is still lacking, and this significantly affects their learning outcomes. Many students show signs of being uninterested, daydreaming, disturbing their peers, and some even appear drowsy in class. Students also tend to feel shy, fearful of answering questions, lack focus, and lack self-confidence when asked to respond to the teacher's questions. At times, the teachers still implement a teacher-centered learning approach, which may not fully engage the students. Consequently, the learning outcomes are not optimal, as evidenced by the low scores in the 2022/2023 Mid-Semester Exam, with the average scores falling below the Minimum Competency Criteria (KKM). Out of 24 students, only 8 students managed to meet the KKM, while the remaining 16 students did not achieve the required standard. Considering this data, it is evident that there is still room for improvement in enhancing students' learning outcomes.

To address the challenges faced by Bantul Elementary School for 3rd-grade students, one ideal solution to increase motivation and learning outcomes is to employ the problem-based learning model. Problem-Based Learning can stimulate students' creativity in solving real-world problems, leading to improved learning outcomes. Anugraheni (2020:11) affirms that Problem-Based Learning (PBL) is a teaching model that involves

students in learning activities and prioritizes real-life problems in their homes, schools, and communities as the basis for acquiring knowledge and concepts through critical thinking and problem-solving skills. The advantages of the Problem-Based Learning model lie in its student-centered approach, its relevance to students' lives, and its ability to foster students' inquiry-based learning (Iswandono, 2017). Students tend to favor learning experiences that directly involve them, as it motivates them and instills enthusiasm in the learning process, leading to positive impacts on their academic performance and providing teachers with valuable experiences in conducting lessons using methods and media that capture students' interests.

Considering the aforementioned background and to address the issues at hand, it is essential to conduct research entitled "Improvement of Motivation and Learning Outcomes in 3rd Grade Students of Bantul Elementary School on the Theme 'Praja Muda Karana' using the Problem-Based Learning Model"

Methode

This research is a Classroom Action Research (CAR). In conducting Classroom Action Research, the actions given to students must be innovative to enhance their creativity. According to Kunandar (2012: 44-45), Classroom Action Research can be defined as a research conducted by a teacher who is also a researcher in their own class or collaboratively with others, involving the design, implementation, and reflective action with the aim of improving the quality of the learning process in the class through specific cycles. The procedure used is the model developed by Kemmis and McTaggart (Suharsimi Arikunto 2019: 137), consisting of planning, action implementation, observation, and reflection. This research consists of two cycles, with each cycle having two meetings. The study was conducted at Bantul Elementary School. The subjects in this study were all 24 students of 3rd grade at Bantul Elementary School, consisting of 13 male students and 11 female students. The research was conducted in the even semester in April 2023. The objective of this study is to improve motivation and learning outcomes on the theme "Praja Muda Karana." The instruments were tested for validity and reliability. Data were collected using questionnaires, tests, and documentation. The questionnaire sheets were used as a guide to observe students' learning motivation during thematic learning. These sheets were filled

out by the students themselves according to their feelings during the learning process. The test technique was used to assess students' abilities and learning outcomes. Data analysis in this study used both quantitative and qualitative descriptive analysis.

1. Quantitative Data

a. Analysis of Learning Motivation Results

Determining Scores Based on Questionnaire Response Choices The calculation of scores becomes the value of the questionnaire response from students according to (Nana Sudjana, 2019:31)

$$P = \frac{F}{A} \times 100$$

Explanation:

P: Percentage of student activity

F: Total score of student activity for each indicator

A: Maximum score of student activity indicator for each aspect.

1) Score Interpretation

Score interpretation is used to assess learning motivation data by categorizing the questionnaire results into specific categories. Each questionnaire statement is grouped according to the observed aspect, and then the total score for each statement is calculated.

Table 1. Scoring Specification for Questionnaire Assessment

No	Information	Score	
		Negative Statement	Positive Statement
1	Often	1	4
2	Sometimes	2	3
3	Seldom	3	2
4	Never	4	1

Tabel 2. Criteria Percentage Learning Motivation

No	Percentage	Qualification
1	$86\% \leq P \leq 100\%$	Very Good
2	$76\% \leq P \leq 85\%$	Good
3	$60\% \leq P \leq 75\%$	Fair
4	$55\% \leq P \leq 59\%$	Poor
5	$0\% \leq P \leq 54\%$	Very Poor

b. Analysis of Students' Learning Outcomes

This analysis is conducted to determine whether there is an improvement in learning outcomes through the implementation of the Problem-Based Learning model.

1) Determining the Class Average Score

From the students' answer sheets, scores are analyzed and obtained. The scores are then converted into grades as follows:

$$\text{Score} = \frac{\text{the scores obtained by students}}{\text{the number of items used}} \times 100\%$$

2) Calculating the Percentage of Students Meeting the Minimum Competency Criteria (KKM) using the following formula:

$$I = \frac{X}{Y} \times 100\%$$

Explanation:

I = percentage of students who passed

X = number of students who obtained a score ≥ 70

Y = number of students who took the test

Each student is considered to have passed their learning (individual completeness) if the proportion of correct answers results in a minimum KKM score of 70.

2. Qualitative Data

This data consists of information in the form of sentences that provide an overview of the learning process activities. Additionally, the students' actions and attitudes during the learning process are also considered

qualitative data. All the data will be analyzed qualitatively in Chapter IV of the research results.

Results

1. Efforts to Improve Motivation and Learning Outcomes

The learning activities were carried out by implementing the Problem-Based Learning model as follows:

a. Syntax 1: Student Orientation to the Problem

Before starting the learning process, the learning objectives were presented to the students so that they were aware of the direction of their learning. Following that, the researcher provided motivation and conducted an ice-breaking activity to ensure a smooth learning process and to help students stay focused. The teacher presented a phenomenon or a story to introduce the problem, motivating students to engage in problem-solving activities they chose. During the learning process, presenting the problem was essential to stimulate students' curiosity and knowledge exploration. The researcher presented problems that matched students' cognitive abilities and were relevant to the ongoing learning material. In this activity, a question-and-answer session was conducted between the teacher and students, making the learning process student-centered.

b. Syntax 2: Organizing Students for Learning

The teacher assisted students in defining and organizing learning tasks related to the problem. The teacher formed study groups, with each group consisting of 4-5 students.

c. Syntax 3: Guiding Individual and Group Investigations

The teacher encouraged students to gather relevant information. A PowerPoint presentation was used as a media to present the material to the students. Each group was provided with a worksheet (LKPD) and asked to discuss and work on it.

d. Syntax 4: Developing and Presenting the Results

In this phase, each group was asked to come forward and present the results of

their discussions. Each group that presented received applause from the other groups as an appreciation.

- e. Syntax 5: Analyzing and Evaluating the Problem-Solving
Process Students were asked to complete an evaluation test given by the teacher.
- f. Reflection and Drawing Conclusions in Learning At the end of the learning process, reflection and drawing conclusions were crucial. This involved reviewing what the students have learned and the topics covered. The teacher asked the students about what they have learned, reinforced the current material, and corrected any errors in the material delivery. The conclusion was reached collaboratively between the teacher and the students.

1. Improvement of Student Learning Motivation

This research was conducted to determine the students' learning motivation, which was carried out in two cycles, with each cycle consisting of two meetings. Cycle I was conducted on Thursday, May 11, 2023, and Saturday, May 13, 2023. Meanwhile, cycle II was conducted on Wednesday, May 17, 2023, and Saturday, May 20, 2023. Both cycle I and II were conducted in face-to-face (offline) settings. The learning motivation in the learning process was implemented using the Problem-Based Learning model. In this study, a questionnaire sheet was used to measure the students' learning motivation. The results of the questionnaire on the improvement of students' learning motivation can be seen in the following table.

Table 3. Criteria Percentage questionnaire on learning motivation

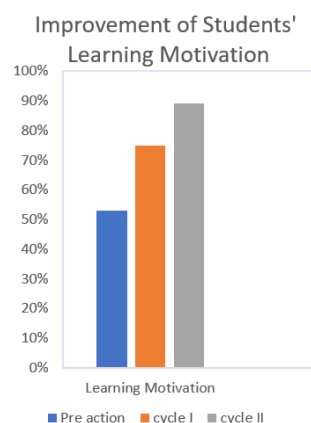
No	Percentage	Qualification
1	$86\% \leq P \leq 100\%$	Very Good
2	$76\% \leq P \leq 85\%$	Good
3	$60\% \leq P \leq 75\%$	Fair
4	$55\% \leq P \leq 59\%$	Poor
5	$0\% \leq P \leq 54\%$	Very Poor

Table 4. Criteria Learning Motivation of 3rd Grade Students.

Criteria	Pre action	Cycle I	Cycle II
Percentage	53% Very Poor	75% Fair	89% Very Good

Based on Table 3 and Table 4, the results of the improvement in learning motivation can be observed before the intervention, where the average motivation percentage was 53%, indicating a "very low" level of student motivation. After implementing the Problem-Based Learning model in Cycle I, the average motivation percentage increased to 75%, indicating a "sufficient" level of student motivation. Meanwhile, in Cycle II, the average learning motivation percentage for students reached 89%, indicating a "very good" level of student motivation. The improvement in learning motivation from Cycle I to Cycle II was 14%.

The improvement in the learning motivation of 3rd-grade students at Bantul Elementary School can be seen in the following diagram.



Picture 1. Diagram of Student Learning Outcome Improvement

From Picture 1, we can observe the improvement in the learning motivation of 3rd-grade students at Bantul Elementary School. In the initial condition, the learning motivation of the students was 53%, which increased to 75% in Cycle I, and 89% in Cycle II. The improvement in learning motivation of students is influenced by the implementation of the Problem-Based Learning model in the learning process, as Problem-Based Learning is a student-centered approach that actively involves students in the learning process and motivates them to participate in the learning process. In the learning process with the Problem-Based Learning model, the teacher presents problems as an initial step to stimulate students' curiosity by relating the material to their daily lives.

2. Improvement of Students' Learning Outcomes

This research was conducted to determine the students' learning outcomes in two cycles, with each cycle consisting of two meetings. The learning outcomes in each session were evaluated using the Problem-Based Learning model. In this study, a evaluation sheet was used to measure the students' learning outcomes. The following are the learning achievement results in each cycle:

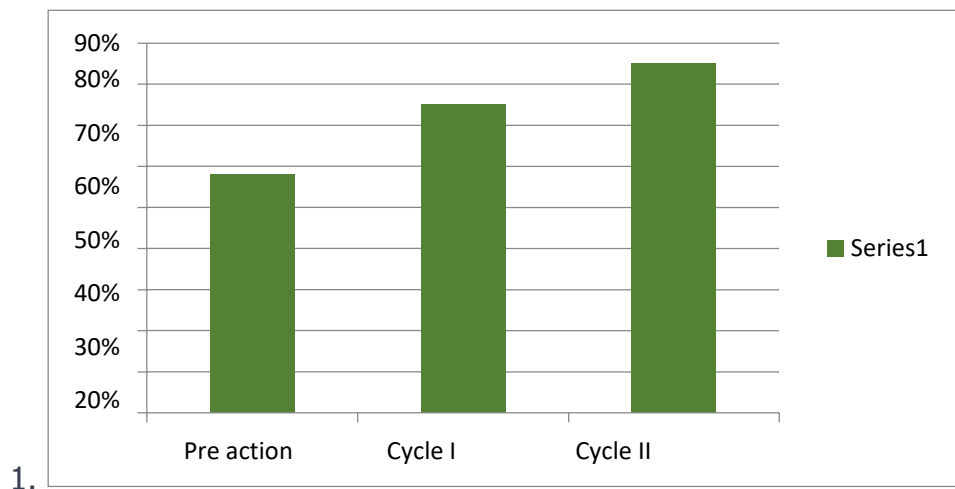
Table 6. Improvement of Learning Outcomes in Each Cycle

Criteria	Score KKM	Pre action	Frequency	Cycle I	Frequency	Cycle I	Frequency
Persentase	>70	58%	14 students	75%	18 students	85%	20 students
	<70	42%	10 students	25%	6 students	15%	4 students

Based on the analysis of the table above, during the pre-intervention phase, out of a total of 24 students, 14 students were successful and 10 students were not successful, with a percentage of 58%. In Cycle I, there was an improvement where 18 students were successful and 6 students were not successful, with a percentage of 75%. In Cycle II, there was further improvement with 20 students being successful and 4 students not successful, with a percentage of 85%. The

improvement in learning outcomes from the pre-intervention to Cycle II shows a highly significant increase.

Comparison of Learning Outcomes for Thematic "Prajaya Muda Karana"
Theme (%)



Picture 2. Percentage of Learning Outcome Graph.

2.

Conclusion

The efforts to improve the learning motivation and outcomes of 3rd-grade students at Bantul Elementary School through thematic learning using the Problem-Based Learning model were carried out in two cycles, with each cycle consisting of two meetings. This research was conducted in a face-to-face (offline) setting. The implementation of the Problem-Based Learning model significantly increased the learning motivation of 3rd-grade students at Bantul Elementary School during thematic learning. This is evident from the improvement in the average scores of students' learning motivation, which started at 53% (very low) during the pre-intervention phase, increased to 75% (sufficient) in Cycle I, and further increased to 85% (very good) in Cycle II. The application of the Problem-Based Learning model also improved the learning outcomes of 3rd-grade students at Bantul

Elementary School during thematic learning. This is evident from the increase in the average evaluation test scores in thematic learning, which started with 14 students passing with a percentage of 58% during the pre-intervention phase, then increased to 18 students passing with a percentage of 75% in Cycle I, and further increased to 20 students passing with a percentage of 89% in Cycle II. Based on the data, it can be concluded that the target for the learning outcomes variable has improved and even exceeded the set target.

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References

- Arikunto, S. (2019). *Prosedur Penelitian [Research Procedures]*. Jakarta: Rineka Cipta.
- Anugraheni, I. (2020). *Meta Analisis Model Pembelajaran Problem Based Learning dalam Meningkatkan Keterampilan Berpikir Kritis di Sekolah Dasar [A Meta-analysis of Problem-Based Learning Models in Increasing Critical Thinking Skills in Elementary Schools]*. Polyglot: Jurnal Ilmiah, 14(1), 9-18.
- Elyas, A. H. (2019). *Penggunaan model pembelajaran e-learning dalam meningkatkan kualitas pembelajaran*. Warta Dharmawangsa, (56).
- Fauzia, H. A. (2020). *Penerapan Model Pembelajaran Problem Based Learning Untuk Meningkatkan Hasil Belajar Matematika SD [Application of Problem-Based Learning Model to Improve Mathematics Learning Outcomes in Elementary Schools]*. Primary: Jurnal Pendidikan Guru Sekolah Dasar, 7(1), 40-47.

- Iswandono. 2017. "Peningkatan Motivasi Belajar dan Hasil Belajar Siswa Kelas II SD Negeri Sarikaya dalam Pembelajaran IPA Melalui Model Pembelajaran Problem Based Learning". Unpublished Thesis. Yogyakarta: FKIP Universitas Sanata Dharma.
- Khusna, M. (2021). Penerapan Model Problem Based Learning (PBL) Berbasis Blended Learning untuk Meningkatkan Motivasi dan Hasil Belajar pada Siswa Kelas VI SD Muhammadiyah Banjaran [Application of Blended Learning-Based Problem-Based Learning Model to Improve Motivation and Learning Outcomes in Grade VI Students at Muhammadiyah Banjaran Elementary School]. *Prosiding PPG PGSD UAD*, 5(3).
- Nashar. 2004. Peranan Motivasi dan Kemampuan Awal dalam Kegiatan Pembelajaran [The Role of Motivation and Initial Ability in Learning Activities]. Jakarta: Delia Press.
- Sardiman. 2013. Interaksi dan Motivasi Belajar Mengajar [Interaction and Learning Motivation]. Jakarta: Rajawali Press.
- Sudaryono, Gaguk, M., & Wardani, R. 2013. Pengembangan Instrumen Penelitian Pendidikan [Development of Educational Research Instruments]. Yogyakarta: Graha Ilmu.
- Sudjana, Nana. 2019. Penilaian Hasil Proses Belajar Mengajar [Assessment of Teaching and Learning Process Outcomes]. Bandung: PT Remaja Rosdakarya.
- Suprijono, Agus. 2016. Cooperative Learning. Yogyakarta: Pustaka Belajar.
- Suryabrata, Sumadi. 2014. Psikologi Pendidikan [Educational Psychology]. Jakarta: Rajawali Pers.
- Susanto, Ahmad. 2013. Teori Belajar dan Pembelajaran di Sekolah Dasar [Theories of Learning and Teaching in Elementary Schools]. Jakarta: Prenadamedia Group.
- Suwartini. 2021. Upaya Meningkatkan Motivasi dan Hasil Belajar Melalui Problem Based Learning dengan Powerpoint di Sekolah Dasar [Efforts to Improve Motivation and Learning Outcomes Through Problem-Based Learning with PowerPoint in Elementary Schools]. *Jurmia Unugiri* 1(1).
- Vitasari, L. (2018). Peningkatan Keaktifan dan Hasil Belajar Matematika Melalui Model Problem Based Learning Siswa Kelas V SD Negeri 5 Kutosari [Improving Activeness and Mathematics Learning Outcomes Through Problem-Based Learning Model in Grade V Students at SD Negeri 5 Kutosari]. *Kalam Cendekia PGSD Kebumen*, 4(3).