

Implementation of Problem-Based Learning with Concrete Media Assistance to Improve Writing Skills of 2nd Grade Elementary School Students

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1. Abstract

This research is motivated by the many problems regarding writing skills at the elementary school level. This is evidenced by the fact that there are still many problems in writing, such as (1) errors in writing words, incomplete written letters, (2) not using punctuation marks, (3) errors in using capital letters, (4) sloppy writing or tend to be difficult to read, and (5) the use of sentences that are not appropriate. One effort to overcome this problem is to apply a *problem-based* learning model assisted by concrete media. The aims of this study were (1) to describe the application of problem-based learning with the help of concrete media in writing activities in Indonesian subjects and (2) to describe the improvement in writing skills of second-grade elementary school students using the problem-based learning model with the help of concrete *media*. This research is class action research, the class action research design used is a class action research design developed by Kemmis and Mc Taggart, namely through the stages of planning, implementing, observing, and reflecting with 2 cycles. Data collection techniques in this study used observation techniques, tests, and documentation. The instruments used were observation guide sheets and performance test assessment sheets. The data analysis technique used in this study consisted of a qualitative descriptive analysis and a quantitative descriptive

analysis. The results showed that (1) the teacher carried out all stages of learning using the problem-based learning model, and (2) the results of students' writing skills increased in each cycle. In cycle I, the percentage of students' achievement in writing skills only reached 26.67%, and in cycle II it increased to 86.2%. So, the application of *the problem-based* learning model assisted by concrete media can improve the writing skills of class II students at the elementary school level.

Keywords: *Problem-Based Learning, Concrete Media, Writing Skills*

2. Introduction

Learning is a process of interaction between students and educators and learning resources in a learning environment. Learning needs to pay attention to and direct students to learning objectives. The learning objectives in the 2013 curriculum are listed in Permendikbud Number 24 of 2016, where the purpose of learning is to develop student competencies including attitude, spiritual, social attitudes, knowledge, and skills competencies (Zuhri Dwi Apriansah & Deri Wanto, 2022).

Indonesian is one of the subjects found at all levels of education. Through Indonesian language lessons, students can communicate orally and in writing well. According to Kelly in Rahayu (2021), language learning is aimed at increasing the ability to understand and use language both orally and in writing. Language has a very important role in learning activities at school. As stated by Ayudiany (2016, p. 1) that "Language has an important role in intellectual, social, emotional development and is a means of supporting success in studying a field of study". In learning Indonesian four aspects of language skills must be mastered by students, namely: (1) listening, (2) reading, (3) speaking, and (4) writing. "The four language skills are a unit that cannot be separated from one another" (Susanto,

2013 p. 241). Listening and reading skills are receptive skills in language, which aim to explore or absorb knowledge, while writing and speaking skills are productive skills, namely skills that aim to express or convey knowledge obtained through receptive skills (Nugroho, 2022 p. 1).

Writing skills begin to be learned in elementary schools (SD) grades 1 and 2. According to Suparno and Yunus in Dalman (2011: 4) writing is an activity of conveying messages (communication) by using written language as a tool or medium in conveying messages. Through writing activities, students can convey their ideas and ideas and can develop their insights and knowledge. Writing activities require complex abilities. Writing is also a process that is carried out repeatedly and continuously, therefore writing activities for students, especially students at the elementary school level, need to get serious attention. In writing activities, of course, you have to pay attention to good and correct writing procedures. Good writing is writing that is appropriate to the learning situation. For example, in learning Indonesian, students must write words or sentences in Indonesian. While correct writing is writing that is by the rules or rules of language, spelling, and other rules that apply in writing. However, in reality, there are still many problems regarding writing skills caused by a lack of learning to write properly in elementary schools. This is reinforced by research conducted by Purnamasari, Madalena, and Rosnaningsih (2020). In this study, it was stated that students in Indonesia have not been able to understand the use of letters according to the rules for writing capital letters correctly.

Based on the results of observations made by researchers, the level of students' writing skills is still relatively low. This is evidenced by the fact that there are still many problems in writing, such as (1) errors in writing words, incomplete written letters, (2) not using

punctuation marks, (3) errors in using capital letters, (4) sloppy writing or tends to be difficult to read, and (5) the use of inappropriate sentences. From these problems, there are several causative factors, among others, from the students themselves and the teacher's way of teaching. The causal factors of students are that students have difficulty placing capital letters and punctuation marks, students are in a hurry in writing and students feel lazy, bored, and bored with writing activities. Meanwhile, the causative factor of the teacher is the learning model used is less varied and there is no use of learning media that is interesting and makes it easier for students to learn. The selection of learning models should be adapted to the needs of students. The learning model has a very important role in increasing students' understanding (Irma Sari et al, 2021).

One of the efforts that can be made to improve students' writing skills is by applying the *Problem-Based Learning* (PBL) learning model. *Problem-Based Learning* (PBL) is a learning method that uses problems as the first step in gathering and integrating new knowledge. *The Problem-Based Learning (PBL)* learning model will effectively help improve student learning activities because it requires students to be active in the stages of group discussion activities. Syamsudin (2020) states that the problem-based learning model can be used to improve the learning process and can make it easier for students to understand the subject matter. In the Problem-Based Learning (PBL) learning model, you must follow the existing steps, which are as follows:

1. Orientation of students to the problem
2. Organizing students to learn
3. Guide group investigations
4. Develop and present the work

5. Analyze and evaluate the problem-solving process (Sumarmi, 2012).

the Problem-Based Learning (PBL) learning model can be accompanied by the use of various learning media, one of which is concrete learning media. The theory of intellectual development put forward by Jean Piaget (Mulyani S, 2019), is that students aged 7-11 years or elementary school age are at the concrete operational stage. At this stage, students need teaching through experience and contact with things that are concrete, real, and can be observed directly. For this reason, in this study, concrete media was used in the hope that students could more easily understand the subject matter presented.

Research on the application of the Problem-Based Learning (PBL) learning model assisted by concrete media to improve students' writing skills has been carried out before, namely, research conducted by Lail Ziyadatul Mahfiroh (2022) with the title "Ability to Write Argumentative Paragraphs Using the Problem-Based Learning Method Assisted by Image Media" ". The results of the study stated that: learning through the Problem-Based Learning (PBL) method can improve the ability or skills of writing argumentative paragraphs in learning Indonesian for class VIII students of junior high school.

Based on the description of the background of the problem, researchers will conduct research to improve students' writing skills at the elementary school level using the *Problem-Based Learning* (PBL) learning model assisted by concrete media with the aim that students have an interest in Indonesian language lessons, especially in writing activities so that students' writing skills are expected to increase. The use of concrete media will provide experiences that hit the minds and understanding of students (Prastowo, 2014; Prayitno & Faizah, 2019; Umardiyah, 2020).

3. Methods

This study uses a class action research method (*Classroom Action Research*). In this study, the classroom action research design used was the classroom action research design developed by Kemmis and Mc Taggart (Sanjaya, 2009), which is in the form of a spiral that is interrelated from one cycle to another. Each cycle or action consists of:

- 1) Planning
- 2) Implementation of actions
- 3) Observation
- 4) Reflection

3.1. Participants and context

This research was conducted in an elementary school in the city of Yogyakarta. This research was conducted from April to May 2023. During this period, observation and implementation of cycles 1 and 2 were carried out. The subjects in this study were 30 class II students with details of 15 male students and 15 female students. While the object of this research is the improvement of students' writing skills.

3.2. Material

Data collection was carried out during cycles 1 and 2. The research data was obtained from the following instruments:

- 1) Performance Test Assessment

The performance test used is in the form of assignments given by the teacher to students to write according to the rules for using capital letters and correct punctuation.

The writing skills assessment format used is guided by Julia Pertiwi (2018: 50) with modifications by researchers as follows:

Table 1. Guidelines for assessing writing skills

No	Aspect	Score Range
1.	Writing tidiness	0 – 20
2.	Correct use of capital letters	0 – 15
3.	Correct use of punctuation marks	0 – 15
4.	Accurate use of sentences	0 – 20
5.	Completeness of the word	0 – 10
6.	Compatibility with objects	0 – 20
Amount		100

2) Observation

Observation is the activity of observing and collecting data to determine the effect of the actions taken (Suharsimi Arikunto, 2010: 127). Observation sheets are used to observe the implementation of learning activities using *problem-based learning models* and student learning activities.

3) Documentation

The type of data used in the documentation is in the form of learning photos, learning videos, student work results, and so on. Documentation in this study is used to support the actions that have been taken and also as consideration for further actions.

3.3. Data Collection and analysis

The data analysis technique used in this study consists of two data analysis techniques as follows:

1) Qualitative Data Analysis

The data analysis technique used in this research is descriptive qualitative for student and teacher observation sheets. The analysis produces descriptive data in the form of written words.

2) Quantitative Data Analysis

Quantitative descriptive data analysis was used to measure the level of student's writing skills by comparing the results in cycle 1 and cycle 2 with the following criteria for writing skills:

a) The formula for the value of writing skills

Writing counts based on the 2013 curriculum assessment guide (Assessment Guide, 2016, p. 56)

$$\text{Value} = \frac{\text{Obtained Value}}{\text{Maximum Value}} \times 100$$

Table 2. Criteria for writing skills

Criteria range	Predicate	Information
$93 \leq x \leq 100$	A	Very well
$85 \leq x \leq 92$	B	Good
$76 \leq x \leq 84$	C	Enough
< 76	D	Need Guidance

(Muspika Jayaningrum et al, 2019)

a) The formula for the average value of writing ability

$$M = \frac{\sum fX}{N}$$

Information :

M = Means

Fx = value x frequency

N = Number of students (Asrul, et al, 2015, p. 178)

3.4. Ethical Considerations

Some of the ethical considerations used in this study are as follows:

1) Voluntary Participation

In this study, if the participants or participants could not participate in the series of research actions as a whole, it was not an issue.

2) confidentiality

The researcher keeps the participant's personal data information and the place or location of the research confidential.

3) Potential hazard

The researcher keeps to a minimum the appearance of potential physical, social, psychological, and all other types of harm in research.

4) Results

Researchers try to ensure that the research conducted is free from plagiarism or other research violations and that the research results presented are accurate.

3.5. Limitations to the Study

In the process of conducting this research, some limitations may affect the results of the study, including the following:

1. There are limitations of time, ability, and research staff.
2. The ability of participants or research subjects that are not on par with friends of their age.
3. This study only conducted an assessment of improving the writing skills of second-grade elementary school students by applying the problem-based learning model assisted by concrete media, especially in the Indonesian language subject.
4. The conclusions drawn are only based on the acquisition of the researcher's data analysis, it is hoped that there will be further research related to improving the writing skills of class II elementary school students with more diverse learning models, the use of different learning media and different and more complete research instruments.

4. Results and Discussion

The implementation of learning is carried out in 2 cycles, each cycle is carried out in two meetings. Based on the implementation of the action for 2 cycles, data was obtained that the student's writing skills had increased. Writing skills are measured using tests, namely assignments given to students in each cycle. The following is the average score for the writing skills of class II students.

Table 3. Comparison of the average results of students' writing skills in the entire cycle.

No	treatment	Percentage	Category
1.	Cycle I	71,83	Enough
2.	Cycle II	86,2	Good

The table above shows that the percentage of students' achievement in writing skills has increased. In the implementation of cycle 1, the criteria for students' writing skills were 71.83% in the sufficient category. In action cycle II, the percentage of students' writing skill criteria increased by 86.2% in the good category. This figure is by the success criteria of the action, namely $\geq 85\%$. This increase is influenced by various factors, both in terms of students and teachers, both in the stages of learning which are always being improved, and the media used to support the implementation of learning. The application of the *Problem-Based Learning* (PBL) learning model assisted by concrete media, can improve students' writing skills by the predetermined aspects of writing skills, namely: students can use capital letters and punctuation marks correctly, students can write with the arrangement of words and letters complete, students can write and use sentences correctly and students have shown an increase in the neatness aspect of writing.

The following is a comparison of the percentage of each aspect of students' writing skills from the entire cycle that has been implemented.

Table 4. Comparison of the results of students' writing skills on each indicator

No	Aspect	Cycle I (%)	Cycle II (%)	Information
1.	Writing tidiness	59	74.5	Increase

2.	Correct use of capital letters	63.5	79.5	Increase
3.	Correct use of punctuation marks	65	93	Increase
4.	Accurate use of sentences	72	84.5	Increase
5.	Completeness of the word	95	95.5	Increase
6.	Compatibility with objects	77.5	90	Increase
Average		71,83	86,2	Increase

The problem-Based Learning (PBL) learning model assisted by concrete media in cycle 1 and cycle 2 shows an increase in each aspect. The aspect of neatness of writing increased from 59% to 70.5%, the aspect of accuracy in using capital letters increased from 63.5% to 79.5%, the aspect of accuracy in using punctuation increased from 65% to 93%, the aspect of accuracy in using sentences increased from 71% to 84.5%, word completeness aspect increased from 95% to 95.5%, suitability aspect with object increased from 77.5% to 90%. While the calculation of the average percentage of acquisition of writing skill results from all aspects shows a significant increase, namely in action 1 of 71.83% to 86.2% in action cycle 2.

Improving every aspect of writing skills is a positive impact from the implementation of the *Problem-Based Learning* (PBL) model assisted by concrete media. In the research that the researchers conducted, students were declared skilled at writing or achieved success in writing skills if they obtained a minimum score of 85. Based on the data obtained, the following is a comparison of the achievement of students' writing skills in cycles 1 and 2.

Table 5. Comparison of the achievement of students' writing skills

No	cycle to-	Achieved	Not Reached
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		Number of Students	Percentage	Number of Students	Percentage
1.	Cycle I	8	26.67 %	22	73.33 %
2.	Cycle II	25	86.2 %	4	13.8 %

Table 5 above shows that the achievement of students' writing skills has increased in each cycle. In cycle I, only 8 students achieved the success criteria for writing skills with a percentage of 26.67%. Whereas in cycle II there were 22 students or 86.2% of students who had achieved the success criteria in writing skills. The percentage of success is not yet 100% due to several causative factors that still need to be improved over a longer and more intensive period.

In addition to the analysis of data on the results of students' writing skills described above, data were also obtained from observations of the implementation of learning and student activities during learning. Based on the results of implementing the actions for 2 cycles, the following results are obtained: all stages of the implementation of the *Problem-Based Learning* (PBL) learning model in each cycle have been carried out and no steps have been missed (complete syntax). In the implementation of learning, students are actively involved and enthusiastic. Students can use concrete learning media provided by the teacher well. Students are also able to do individual assignments related to writing skills by the direction of time given by the teacher. When carrying out presentation activities or presenting work, it has been seen that there is an increase in self-confidence in students, although there are still students who are shy when coming forward to present or present their work. At the end of the learning activity, students also seemed enthusiastic about

concluding learning with the teacher. Based on the observation of learning that has been carried out for two cycles, overall students feel happier, not easily bored, and enthusiastic about participating in learning.

5. Conclusion

Problem-Based Learning model assisted by concrete media to improve the writing skills of second-grade elementary school students, the following conclusions are obtained: the implementation of learning by applying *the problem-based learning* model to improve writing skills consists of two cycles. The steps applied in each cycle are 1) Orientation of students to problems, 2) Organizing students for learning, 3) Guiding group investigations, 4) Developing and presenting work, and 5) Analyzing and evaluating the problem-solving process.

The results showed that there was an increase in the average writing score and an increase in the achievement of students' writing skills classically in each cycle. In cycle I the level of students' writing skills is still low classically because it is still in the sufficient criteria, that is, it has not reached the limit of $\geq 85\%$. Whereas in cycle II, students' writing skills classically have reached good criteria, this is indicated by the increase in the percentage of results of writing skills in each of its aspects.

Thus the application of the Problem-Based Learning (PBL) learning model assisted by concrete media can improve the writing skills of class II students in one of the elementary schools in the city of Yogyakarta. Furthermore, this research is expected to be able to make good contributions to researchers, teachers, and students. For students, this research is expected to improve understanding and writing skills from several aspects of existing writing skills. As for teachers and society in general, it is hoped that this research can

provide access to additional references related to learning and improving writing skills.

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