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Improving Student Learning Outcomes with the Problem Based Learning Model: Classroom Action Research at the State Islamic Primary School

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Abstract: This research aims to improve student learning outcomes by using a problem based learning model. This research uses a type of classroom action research. The subjects of this research were third grade students of State Islamic Primary School of 41 Aceh Besar. Data collection techniques in this research are observation and tests. Data were analyzed using descriptive statistical techniques. The results of the research show that student learning outcomes in the third grade Theme 8 material at State Islamic primary School of 41 Aceh Besar using the problem based learning model have increased in each cycle. In cycle I, student learning outcomes reached 73.33% but had not yet reached the classical success indicators, then in cycle II student learning outcomes increased, namely reaching 80% but had reached the classical success indicators. These results show that by using a problem-based learning model, student learning outcomes have increased and achieved indicators of success. Therefore, the problem-based learning model can be used as an alternative learning model that can overcome the problem of low student learning outcomes.

Keywords: learning outcomes, problem based learning, elementary school students.

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INTRODUCTION

Education includes learning experiences in formal, non-formal and non-formal formats inside and outside school (Dasopang et al., 2023). Furthermore, Santrock (2011) states that education is the process of influencing students to adapt to their environment as well as possible, thereby causing changes in individuals that enable them to function well in society. One way to get education is from a formal school (Husti, 2022). Education transmits and shapes cognitive, emotional and psychomotor knowledge obtained through education (Nurliza et al., 2024). Furthermore, Wolfolk (2016) stated that the main goal of education is the transfer of knowledge or the process of human development towards education. Transferring knowledge acquired in schools and training institutions to the real

world is a natural outcome of student knowledge. This knowledge is obtained through guidance from teachers (Darmadi, 2016; Dasopang et al., 2022).

Learning itself is a teaching and learning activity in which the teacher is responsible for teaching and implementing education for students, both in cognitive, emotional and psychomotor aspects (Lubis, 2019; Silvia et al., 2023). Learning should aim to facilitate the achievement of the competencies designed in the curriculum, so that each student becomes a lifelong independent learner (Schunk, 2012). Practical learning in elementary schools means learning with a thematic approach.

Thematic learning is essentially an integrated curriculum model that uses themes to connect several subjects so as to provide meaningful experiences for students (Dasopang & Lubis, 2021; Hidayah, 2017). Furthermore, Setiawan (2020) stated that thematic learning is a learning approach that integrates various competencies from various subjects into a topic through a meaningful learning process that is adapted to student development. This approach aims to prevent students from learning partially, and learning can provide them with a complete meaning that is reflected in the various topics available (Dasopang et al., 2020). Thematic learning in elementary schools is a learning process that focuses on how to organize learning in such a way that it stimulates students' creativity and creative thinking, not just doing activities (Ningsih & Mahyuddin, 2021).

Learning outcomes can be interpreted as the degree of success of students in studying a subject at school and are expressed in the grades obtained from test results in a particular subject (Lubis et al., 2021). Furthermore, evaluating learning outcomes has an important meaning in the world of education, especially in the world of school education, so teachers and other educators should evaluate student learning outcomes by implementing it, both for students, teachers and schools (Lubis & Dasopang, 2020; Seftiani, 2019) .

In this case, researchers conducted a preliminary study using the observation method to determine student learning outcomes that occurred in class. The findings in the preliminary study showed that students experienced difficulties in achieving learning goals which had an impact on low student learning outcomes. The low student learning outcomes are proven by data from 7 inactive students in the "low" category in participating in learning and from a total of 23 students. During learning, students just sit, listen, take notes and memorize the material presented. This is caused by the use of learning models that do not activate students.

According to the learning model, learning steps and tools are used to achieve goals (Hanafiah et al., 2021). The application of a learning model that does not activate students makes students reluctant to ask questions and play an active role during learning so that students' understanding of thematic learning is low and the main learning objectives in thematic learning are not achieved.

Apart from observations, researchers also conducted interviews with third grade teachers to obtain information about the conditions or behavior of students that appeared and often occurred during the learning process. Apart from that, researchers also obtained data or documents on student test scores in thematic learning. Based on the information obtained, the minimum completeness criteria for thematic learning is 70. The results of the thematic learning test scores show that 16 students have reached the minimum completeness criteria with a percentage of 69.56% and there are still 7 students who have not reached the minimum completeness criteria with a percentage of 30.44%.

Based on the results of observations and interviews, researchers saw that the learning model applied to third grade students of the State Islamic Primary School of 41 Aceh Besar had not been able to improve student learning outcomes during the learning process, resulting in low student learning outcomes and many students had not reached the minimum criteria for completeness. set. Therefore, it can be concluded that the learning activity of third grade students in thematic learning is still low, thus affecting student learning outcomes. For this reason, researchers provide a solution to use the Problem Based Learning model in order to improve student learning outcomes in thematic

learning. Problem Based Learning is a learning model that uses real world problems as a context for students to learn critical thinking and problem solving skills as well as to gain essential knowledge and concepts from the lesson material (Darwati & Purana, 2021; Sari et al., 2021). The stages of the Problem Based Learning model consist of five stages in teacher treatment, namely: (1) phase 1: student orientation to the problem; (2) phase 2: organizing students to study; (3) phase 3: guiding individual and group investigations; (4) phase 4: develop and present the work; (5) phase 5: analyze and evaluate the problem solving process. The use of the Problem Based Learning learning model is expected to improve the learning outcomes of class III students in Thematic learning (Ismaimuza, 2013; Mayasari et al., 2022).

METHODS

The research carried out is classroom action research. Classroom action research is research conducted to discover how a group of teachers can organize the conditions of their learning practices, so that students can learn from their own experiences (Arikunto, 2010). They can test an improvement idea in their learning practices and see the real impact of the effort. This research step includes 4 steps, namely 1) planning; 2) action; 3) observation; and 4) reflection. Below is a chart of the research design.

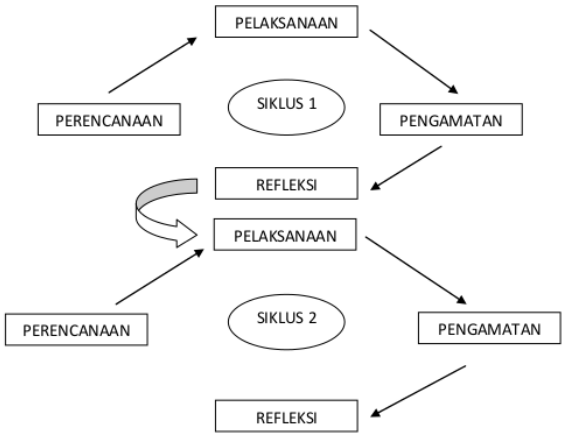

Figure 1. *Research Design*

This research is research that provides action in the form of implementing cooperative learning Problem Based Learning in thematic learning related to efforts to increase the learning achievement of third grade students at the State Islamic Primary School of 41 Aceh Besar. The qualitative approach in this research was used to get a clear and real picture of the process of implementing the learning steps implemented in the classroom, while the quantitative approach in this research was used to find improvements in student learning outcomes as a result of implementing the Problem Based Learning cooperative learning model.

The author's experience was obtained from the observation process which was supported by observation sheets and questionnaires. Through observation sheets the author emphasizes learning conditions in classes that apply Problem Based Learning, through questionnaires the author emphasizes student responses to the application of Problem Based Learning in Thematic Lessons.

In this research, the researcher conducted his own research and was directly involved in the research process from the beginning to the end of the research. This type of research refers to the place or context in which the research is carried out. Because this research was carried out in the classroom and was aimed at improving classroom learning. The results of this research include student perceptions and student learning outcomes in thematic learning using the Problem Based Learning model. Student

perceptions and student learning outcomes can be seen from the increase in action between the first cycle, second cycle and third cycle.

The research subjects were third grade students of the State Islamic Primary School of 41 Aceh Besar with a total of 23 students. This research was conducted at the state Islamic primary school of 41 Aceh Besar which is located on Jl. Banda Aceh-Meulaboh Lhoong Aceh Besar. This research stage consists of 4 stages, namely 1) Planning; 2) Action; 3) Observation; and 4) Reflection. These steps were repeated in each cycle of this research. The data obtained is qualitative and quantitative data. These data were then analyzed using descriptive statistical techniques.

RESULTS

The research was carried out at the state Islamic primary school of 41 Aceh Besar in third grade with the number of students in the class totaling 23 students, consisting of 12 boys and 11 girls. This research was carried out in three cycles. The first cycle was held on Saturday 11 June 2022, the second cycle was held on Monday 20 June 2022, and the third cycle was held on Wednesday 29 June 2022. Researchers also provided the final evaluation questions in each cycle which were given to students to see learning outcomes and the extent to which students are able to solve questions according to the material that has been presented.

Based on the results of observations of several aspects of student activities in the first cycle, it can be seen that there are several aspects that received the maximum score with a score of 4, namely the students' ability to respond to greetings and pray together, the students' ability to listen to the teacher's explanation about the objectives and subject matter that will be studied today. . Theme 8 subtheme 4 learning 2, while the lowest with a score of 2 is in the aspect of students' ability to summarize learning material, and ability to respond to class discussions. For other aspects, the average score was 3. The observation score was 80%, meaning that the level of success of students' activities based on observations was good. Meanwhile, in the second cycle, 19 students completed with a percentage of 82.60%, while 4 students did not complete with a percentage of 17.39%. If we look at the minimum completeness criteria score in the state Islamic primary school of 41 Aceh Besar, students are said to be complete if their learning results reach the minimum completeness criteria score. So the student learning outcomes in the second cycle have reached learning completeness.

The learning process in this research was taught directly by the researcher himself using a problem based learning model in mathematics lessons regarding decimal multiplication operations in third grade at the State Islamic Primary School of 41 Aceh Besar. Meanwhile, the thematic teacher in the class is NI (observer). Teacher and student activities are also observed based on the observation sheet that has been provided in accordance with the activities in the learning implementation plan that has been prepared.

The research was carried out in two cycles, the first cycle was carried out on 11 June 2022, the second cycle was carried out on 20 June 2022, which aimed to see the effectiveness of using the problem based learning model in improving student learning outcomes in Theme 8 material for third grade State Islamic Primary School of 41 Aceh Besar.

The teacher's activities during the learning process using the problem based learning model are as follows: The teacher opens the class with prayer and greetings, the teacher gives an apperception, the teacher conveys motivation and learning objectives, the teacher delivers the material, the teacher directs students to fill in students' worksheets, the teacher explains about the problem based learning model along with the steps for using it and for example, the teacher asks questions and answers with students, the teacher concludes the material, provides an evaluation, the teacher conveys reflections and moral messages and finally closes the class with prayer.

In the first cycle there were several aspects that had not been implemented as desired. When the teacher explained the material, it was discovered that the method of delivering the material was not appropriate which meant that students still did not understand the material the teacher was teaching, so in the second cycle the teacher began to control the way the material was delivered with the help of observers. In the final stage of learning the teacher also seemed less able to convey conclusions, reflections and moral messages clearly and include things that had been taught, so in the second cycle the teacher improved this by noting down the things that needed to be conveyed during the closing activity and asking questions to Observer first before starting learning. In the second cycle the teacher's overall activities improved and the problems in the first cycle could also be improved properly. It's just that in the second cycle the teacher spent too much time conveying moral messages which left students with little time for asking questions.

The learning activities carried out by teachers from the first and second cycles have increased. This can be seen from the score obtained in the first cycle with a percentage of 69.56% (good category), the second cycle with a percentage of 82.60% (very good category). Based on these data, it can be seen that the teacher's activities in carrying out learning using the problem based learning model in third grade Theme 8 material can achieve a very good title and have been carried out in accordance with the learning implementation plans that have been prepared in both the first and second cycles.

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Student activities during the learning process using the problem based learning model include students answering greetings and prayers, students having discussions with the teacher about previous material, students listening to the presentation of motivation and learning objectives, students absorbing the delivery of lesson material, students listening to how to fill in the participant's worksheet. students, students listen about the use of the problem based learning model along with steps and examples, students discuss and try to solve example questions on student worksheets, students present their work results in front of the class, students conclude the material, students answer evaluation questions, students convey reflections and also a moral message.

In the first cycle there were several aspects that had not been implemented as desired. When the teacher conducts apperception, students are less active in asking questions and answers with the teacher. Students also lack the courage to present their work results in front of the class, convey conclusions and also reflect. From some of these problems it can be said that students lack confidence in class, so in the next cycle the teacher will try to make the class atmosphere cheerful, guide students or invite students to do this first to attract students' attention and response and also give prizes.

In the second cycle, student activities as a whole improved and also the problems in cycle I could be improved properly. It's just that in the second cycle students were still less able to respond to discussions. Then the problems in the second cycle regarding students' ability to respond to discussions were resolved well. Learning activities have been carried out in accordance with the learning implementation plan that has been prepared.

The learning activities carried out by students from the first and second cycles have increased. This can be seen from the score obtained in the first cycle with a percentage of 73.33% (good category), the second cycle with a percentage of 80% (very good category).

Based on these data, it can be seen that student activities in carrying out learning using the problem based learning model in Theme 8 material at the State Islamic Primary School of 41 Aceh Besar can achieve a very good predicate and have been carried out in accordance with the learning implementation plan that has been prepared well in the cycle first and second cycles.

The factors that support an increase in student activity are because the learning process has been carried out in accordance with the prepared learning implementation plan, and the teacher always reflects and makes improvements in each cycle that has deficiencies, such as in the delivery of material, conclusions and so on. Students also always try to be better in each cycle.

Researchers use test questions in each cycle to see the extent of students' abilities after following the learning process using the problem based learning model on multiplication calculation operations. At the end of the meeting, the researcher also gave a post-test to see the overall improvement in student learning outcomes. Giving tests aims to determine students' success in understanding the material that the teacher has provided.

The completeness of individual student learning outcomes is seen based on the minimum completeness criteria value that has been set at the state Islamic primary school of 41 Aceh Besar, namely 70 and classical completeness, namely 80%. Based on the results of the final test, student learning outcomes have improved. In the first cycle, the percentage of completeness of student learning outcomes reached 73.33%, which means that students have not yet achieved classical learning completeness. There were 16 students who had completed and 7 students who had not completed. It is known that the reason why 7 students have not completed it is that students are still a bit confused about applying the problem based learning model in solving problems. In the second cycle, student learning outcomes increased, namely reaching 80%, having achieved classical student learning completeness. There were 19 students who had completed and 4 students who had not completed. It is known that the factors that cause students not to finish are that there are some students who are not ready when working on questions and are not careful in doing their assignments.

From the results of the analysis above, it can be said that student learning outcomes have increased in each cycle and it can be concluded that the improvement in third grade student learning outcomes at the state Islamic primary school of 41 Aceh Besar using the problem based learning model in Theme 8 is complete and can improve results. Study.

Factors that support the achievement of success in improving learning outcomes are the use of interesting and new models, namely the use of models that are easy and different from usual which can also be easily understood by students, the preparation of neat and simple learning activities that do not make students easily bored. and fatigue and a teacher's sensitivity to deficiencies found in each learning cycle that can be corrected properly.

DISCUSSION

The results of this research show that student learning outcomes can be improved by implementing the problem based learning model. The increase that occurred was caused by several things, one of which was student involvement which was more dominant in solving problems in learning. Student involvement in the problem solving process during learning provides students with a more meaningful experience, so that the concepts given are easier for them to understand. This is in accordance with the findings of Ningsih et al. (2023) which states that achieving learning goals will be easier if students play an active role during the learning process.

Apart from student involvement in the learning process, increased learning outcomes also occur due to the existence of work teams in solving problems in the application of the problem based learning model. Slavin (2015) explains that group

learning allows for more effective knowledge transformation. In line with Slavin, Lubis (2019) stated that group learning can also increase the chances of achieving learning objectives because problems are solved with the role of all participants in the group. Furthermore, apart from improving learning outcomes, group work can also help shape student character (Lubis & Wangid, 2019)

The application of the problem based learning model is also inseparable from the use of learning media, so that learning outcomes can be more optimal. This is in accordance with the findings of (Pramana et al., 2020) which states that learning media plays an important role in optimizing the application of the problem based learning model because students will find it easier to analyze problems, understand material concepts and make problem solving more effective. Furthermore, Lubis & Lubis (2024) in their findings stated that learning using learning media will make it easier to achieve learning goals.

CONCLUSION

Based on analysis of the results of research conducted in the third grade of the Islamic Primary School of 41 Aceh Besar with third grade research subjects totaling 23 students. It can be concluded that student learning outcomes in Theme 8 material for class three of the State Islamic Primary School of 41 Aceh Besar using the problem based learning model have increased in each cycle. In the first cycle student learning outcomes reached 73.33% but had not yet reached the classical indicators of success, then in the second cycle student learning outcomes increased, namely reaching 80% but had reached the classical indicators of success. These results show that by using the problem based learning model, student learning outcomes have increased and achieved indicators of success.

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