

INCREASING ACTIVITIES AND RESULTS OF LEARNING OF 4TH CLASS SCHOOL STUDENTS THROUGH APPLICATION OF LEARNING MODEL BASED ON PROBLEM-BASED LEARNING PROBLEMS FOR THEMATIC LEARNING

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Abstract: The purpose of this study is to 1) Describe the steps in applying PBL in increasing the activeness and thematic learning outcomes of class 4, 2) To find out the increase in activeness through the application of PBL in grade 4, 3) Class 4 the type of research is Classroom Action research (CAR). This study was conducted in 2 cycles using the Kemmis and Taggart model design consisting of 3 stages, namely planning, implementation and observation (acting and observing) and reflection (reflecting). The data collection instruments used were questionnaire sheets, observation sheets and written test. The subjects in this study were fourth grade student of Bringin 02 Elementary School Semarang Regency, amounting to 36 students. The results of this study indicate the percentage increase in student activity from the pre cycle which is categorized as student activity is very high and high only 16.66% to 41.67% in the first cycle and increased again in the second cycle to 77.78%. This increase also has a good impact on the percentage of student learning completeness, which initially only 36.11% of students completed increased to 58.33% in the first cycle and increased again in the second cycle to 86.11%. The result of the study with the problem based learning model prove that this model can improve the activity and learning outcomes of 4th grade students at Bringin 02 Elementary School Semarang Regency in semester II of 2018/2019 Academic Year.

Keyword : Problem Based Learning (PBL), Student Activity, Learning Outcomes

Abstrak: Tujuan penelitian ini untuk 1) mendeskripsikan langkah-langkah penerapan PBL dalam meningkatkan keaktifan dan hasil belajar tematik siswa kelas 4, 2) Untuk mengetahui peningkatan keaktifan melalui penerapan PBL pada siswa kelas 4, 3) Untuk mengetahui peningkatan hasil belajar tematik melalui penerapan PBL pada siswa kelas 4. Jenis penelitian yang dilakukan adalah Penelitian Tindakan Kelas (PTK). Penelitian ini dilakukan dalam 2 siklus dengan menggunakan desain model Kemmis dan Taggart yang terdiri dari 3 tahap yaitu perencanaan (*planning*), pelaksanaan dan pengamatan (*acting and observing*) dan refleksi (*reflecting*). Instrumen pengumpulan data yang digunakan adalah lembar angket, lembar observasi dan tes tertulis. Subjek dalam penelitian ini yaitu siswa kelas 4 SDN Bringin 02 Kabupaten Semarang yang berjumlah 36 siswa. Hasil penelitian ini menunjukkan persentase peningkatan keaktifan siswa dari pra siklus yang dikategorikan keaktifan siswa sangat tinggi dan tinggi hanya 16.66% menjadi 41.67% pada siklus ke I dan meningkat lagi pada siklus ke II menjadi 77.78%. Peningkatan ini berdampak baik juga bagi persentase ketuntasan belajar siswa yang awalnya hanya 36.11% siswa yang tuntas, meningkat menjadi 58.33% pada siklus I dan meningkat lagi pada siklus II menjadi 86.11%. Hasil penelitian dengan model pembelajaran *problem based learning* ini membuktikan bahwa model ini dapat meningkatkan keaktifan dan hasil belajar siswa kelas 4 SDN Bringin 02 Kabupaten Semarang semester II Tahun Pelajaran 2018/2019.

Kata Kunci : *Problem Based Learning* (PBL), Keaktifan Siswa, Hasil Belajar

INTRODUCTION

The 2013 curriculum, in its application, emphasises integrative thematic approaches, namely a learning approach that integrates various competencies from various subjects into themes. (Majid & Rochman, 2014: 107). In the process, the learning approach to thematic learning positions students more as subjects of learning while more teachers are facilitators. Therefore, the activity in the student learning process will affect student learning outcomes.

From the results of observations at Elementary SchoolBringin 02 Semarang Regency, it was found that the method or learning model used by the teacher had been widely lectured and rarely used a relevant learning approach or model. This results in students in the learning process tend to be more passive. Even though in thematic learning, students are expected to seek, construct and use knowledge independently. Therefore, knowledge is not only sourced from the teacher, but students can look for it from various sources around it. It will require students to be more active during the learning process so that learning becomes more meaningful. Student learning activeness itself is a process that involves students to actively participate both physically and mentally in learning activities (Pamungkas, Kristin, & Anugraheni, 2018: 288). The activeness of the students in the learning process that involves emotional abilities and creativity will enhance students' skills in mastering concepts, developing themselves, developing understanding, developing social interaction and critical thinking (Tazminar, 2015: 47). So, it is not just science that develops, but also talent can develop if students are encouraged to be active in the learning process.

Learning outcomes are the culmination of the student learning success towards predetermined learning goals. Student learning outcomes include cognitive aspects (knowledge), affective (attitude), and psychomotor

(behaviour) (Kristin, 2016: 92). Whereas according to (Kuraedah, 2016: 149), learning outcomes are the results achieved by students after following the learning process through learning outcomes tests or evaluations that have been determined by the teacher. Learning outcomes are changes that occur within the individual in an orderly and purposeful manner, which is to achieve something good and new from before.

But in reality, the results of preliminary observations regarding the student activity were found to be the percentage of categorical activity that was very high and high with a total of 16.66% of the total students. The low activity of students has an impact on the completeness of student learning outcomes. It is known that the percentage of students' mastery learning is only 36.11% or only 13 students are passed from 36 students. To be able to overcome these problems, we need research/action that can later improve the activity and the student learning outcomes. In this study, the authors collaborated with class teachers to be able to increase the activity and thematic learning outcomes of 4th grade students of Elementary SchoolBringin 02 Semarang Regency using problem-based learning models.

PBL learning model chosen as an alternative solution to the problems above since in the PBL learning model; students will be faced with a problem, either directly or in the form of case studies by utilising the surrounding environment to be solved by students (Mungzilina, Kristin, & Anugraheni, 2018: 186). Problem Based Learning or in a problem-based learning model is a learning model that involves students in learning activities that prioritize real problems both in the school, home, or community as a basis for gaining knowledge and concepts through the ability to think critically and solve problems (Anugraheni, 2018). According to (Pramudya, 2019) Problem based Learning is a learning process that

during the learning process the material is related to real experiences of students and also related to conditions in the surrounding environment which later students will be able to learn actively and think concretely. Sugiyanto (2010: 159) in the PBL learning model there are main steps that include teacher and student behaviour, namely phase 1) Student orientation to problems, phase 2) Organizing students to learn, phase 3) Guiding individual and group investigations, phase 4) Developing and present the work, phase 5) Analyze and evaluate the problem solving process. The advantages of PBL models according to (Trianto, 2010: 96) include 1) Following the daily life of the students, 2) Concepts Concept that fits the students need, 3) Nurturing the nature of the student inquiry, 4) Retention of strong concepts, 5) Improving problem-solving skills.

Based on some descriptions of the notion of problem-based learning, it can be concluded that problem-based learning is learning that confronts students on real-world problems that later they can find solutions to problems faced.

In order to improve the activity and learning outcomes of 4th grade students at Elementary SchoolBringin 02 Semarang Regency, a study was conducted with the aim of 1) To describe the steps in implementing problem based learning learning models in increasing the activity and thematic learning outcomes of 4th grade students at Elementary SchoolBringin 02, 2) To determine the increase of activeness through the application of problem based learning learning models in 4th grade students at Elementary SchoolBringin 02, 3) To determine the improvement of thematic learning outcomes through the application of problem based learning learning models in 4th grade students at Elementary SchoolBringin 02.

METHOD

This study used classroom action research. The procedure of this study used the Kemmis model developed by Stephen Kemmis and Robin Mc Taggart, who used a cycle system. In this study, two cycles were used, which in each cycle consisted of 3 stages. Data collection techniques used in this study were observation, rubrics and tests. Observation is used to obtain data about the behaviour and activities of students and teachers in the learning process that uses the PBL model. The activeness rubric is used to measure student activity, which aims to make the students understand the basis of the assessment to be used while the test is used to measure the completeness of student learning outcomes.

This research used technical comparative descriptive analysis, namely by comparing the results of the acquisition of values in the first cycle and second cycle. Qualitative techniques are used to show the achievement of student activity from cycle I to cycle II. Then the quantitative technique is used to analyse the achievement of learning outcomes in the first cycle and second cycle.

Discussion

The PBL approach is an approach that in the learning process can help students to develop student activities in the learning process (Rahmadani & Anugraheni, 2017). The application of the PBL learning model in this study can be said to be successful if the percentage of the student activity in the second cycle is very high and has reached the amount of 75%, and the number of percentages of student mastery learning reaches a percentage of 80% of 36 students or has reached the specified MCC which is 70. The range of students' activeness scores and categories in this study are 1) 77- 63 scores are categorised as very high student activity, 2) 62-48 scores are categorised as high student activeness, 3) 47-33 scores are categorised as active

students and, 4) 32-18 scores are categorised as a low student activity.

In this study, the authors used two cycles. In each cycle, there are three meetings, and each meeting is given 3 X 35 minutes using the problem-based learning model in theme 8, sub-theme 1 4th grade elementary school. The following percentage is a comparison of the learning accuracy of the 4th grade students of Elementary School Bringin 02 from the pre-cycle (initial conditions) and after giving the action using the problem-based learning model in cycle I and cycle II. In the pre-active activity cycle, students categorised as very active amounted to 5.56%, students categorised with high activity amounted to 11.11%, students who were categorised with moderate activity amounted to 19.44 and students categorised with low activity amounted to 63.89%. After being given action by using the PBL learning model in the first cycle, the activity of students who were categorised as very high increased to 13.89%, students who categorised high activity as 27.77%, activeness of students who were categorised to be 41.66% and students categorised as low activeness to 16.67%. In the second cycle, the researcher conducted an action using the PBL learning model and the results in the second cycle of the activity of highly categorized students increased again to 25%, students who categorized as high activity increased again to 52.78%, activeness of students who were categorized to be 22.22% students categorized as low to 0%.

It can be seen that there is an increase in the percentage of student learning activeness. In the pre-cycle, students categorised as very high and high were 16.67% then after being given action in the first cycle the percentage of student activity increased by 24.99% or the activity of students categorised as very high and high in the first cycle became 41.66%. In the second cycle, the researcher conducted an action using PBL learning model, and the result was an increase of 36.12%, or the activity of

the categorised students was very high and high in the second cycle of the percentage is 77.78%.

Success in increasing student activity is also followed by success in increasing the percentage of student learning outcomes. It can be seen from the completeness of student learning outcomes in the pre-cycle which only reached a percentage of 36.11% of students who master the learning and for students who did not master the learning amounted to 63.89%. Then, in the first cycle, researchers took action using the PBL learning model and the results of students who master the learning increased to 58.33% and students who did not master the learning decreased to 41.67%. In the second cycle, researchers retook an action using PBL learning models with results: in the second cycle students who master the learning increased to 86.11% and students who did not master the learning decreased to 13.89%. From the results of the percentage, it can be concluded that the PBL learning model can improve the learning outcomes of 4th grade students of Elementary School Bringin 02 Semarang Regency. Based on the percentage results of activeness and student learning outcomes in the first cycle and second cycle, there was an increase in each cycle. It can be concluded that the PBL learning model by carrying out problem-based activities and working in groups can increase the activity and learning outcomes of 4th grade students at Elementary School Bringin 02 on theme 8, sub-theme 1. The results of this study, complement and strengthen previous research by Dewi, Sumarmi & Amirudin (2016), which the PBL learning model can improve student activity. Problem Based Learning (PBL) is also used by Rahmasari (2016) in her research to prove that Problem Based Learning (PBL) can improve student learning outcomes. This can be seen from the percentage of student activity in very high and high categories which initially on pre-cycle only 16.66% increased in

cycle I to 41.67% and increased again in cycle II to 77.78% while an increasing percentage of learning outcomes initially only 36.11% increased to 58.33 % in cycle I and in cycle II it increased again to 77.78%. Based on these studies, it proves that the PBL learning model can improve student activity and learning outcomes.

The advantage of this study compared to other studies is that in this study measuring the increase in the percentage of activeness as well as student learning outcomes by using the problem-based learning model in theme 8, sub-theme 1 in 4th grade students. For learning outcomes, researchers used multiple choice evaluation tests. Researchers also use real problems, so students are easier to understand the learning material that they were taught.

CONCLUSION

Based on the results of the above research, the application of the Problem Based Learning (PBL) model can be used to increase the activity and learning outcomes of 4th grade students at Elementary School Bringin 02 Semarang Regency in the second semester of the 2018/2019 academic year. The results of the percentage of study activity on pre-cycle learning amounted to 16.66% or 6 students who categorised very high and high activity. In the first cycle increased to 41.67% or 15 students who categorised very high and high activity. Then in the second cycle increased again to 77.78% or 28 students who categorised very high and high activeness. While to increase learning outcomes in the pre-cycle, the percentage of completeness of learning outcomes was only 36.11% or 13 students who completed increased in the first cycle to 58.33% or 21 students who complete and in the second cycle there is an increase in the percentage of completeness of learning outcomes to 86.11% or 31 students who complete. Thus the hypothesis proposed by the researcher has proven that the application of the problem-based

learning (PBL) model can be used to increase the activity and learning outcomes of 4th grade students at Elementary School Bringin 02 Semarang Regency.

Based on the findings and conclusions of the research results, the suggestions that can be conveyed by the researcher to the teacher are that it is expected that the problem-based learning model can be used as an option that can be used by the teacher in learning. Before using the Problem Based Learning (PBL) model, the material should be chosen beforehand which can be linked to daily life or real events that occurred around the students, so they are more interested in solving problems. Teachers are also expected to be more creative in developing learning models and able to create learning activities that can hone students' activeness. The problem-based learning model continues to be developed in learning because it is very helpful in training the problem solving by students and this model is also very appropriate to be used for the upper class in helping high-level thinking.

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