

THE IMPLEMENTATION OF PROBLEM-BASED LEARNING MODEL IN THEMATIC LEARNING FOR 4TH GRADE STUDENTS TO IMPROVE THE STUDENTS' CRITICAL THINKING SKILLS

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Abstract : *The Implementation Of Problem-Based Learning Model In Thematic Learning For 4th Grade Students To Improve The Students' Critical Thinking Skills.* The aim of this research is to know whether the students' thinking skills can be improved through PBL model and to know the most suitable PBL steps which can improve the critical thinking skills of 4th grade students of Koripan 01 Public Primary School, second semester, the academic year of 2018/2019. The type of this research is Classroom Action Research (CAR). In conducting this research, researchers used the C. Kemmis and Robin Mc. Tanggar model which consisted of four main activities, namely planning, implementing, monitoring, and reflecting in each cycle. Subject of this research are 24 4th grade students of Koripan 01 Public Primary School. The method of collecting data is by using observation sheet containing assessment rubric. The result shows that the improvement of learning creativity in thematic learning through PBL with a comparison between cycle I to cycle II which is increasing as much as 62% of all students. Critical thinking skills are very high clarification in cycle I which has a score of 13% increasing to 75% of all students in cycle II. The steps of PBL model used to improve the students' critical thinking are 1) orienting the student to problems, 2) organizing the students to study, 3) guiding the individual or group study, 4) developing and presenting the result, and 5) analyzing and evaluating the problem-solving process.

Keyword: Critical Thinking Skills, Problem-Based Learning, Thematic for 4th grade

Abstrak: *Penerapan Model Problem Based Learning dalam Pembelajaran Tematik Kelas 4 Untuk Meningkatkan Keterampilan Berpikir Kritis Peserta Didik.* Tujuan penelitian ini yaitu untuk mengetahui apakah peningkatan keterampilan berpikir kritis peserta didik dapat diupayakan melalui model PBL serta untuk mengetahui bagaimanakah langkah-langkah PBL yang dapat meningkatkan keterampilan berpikir kritis peserta didik kelas 4 SDN Koripan 01 semester 2 tahun pelajaran 2018/2019. Metode dari penelitian ini adalah penelitian tindakan kelas atau sering disebut juga dengan PTK. Dalam pelaksanaan penelitian ini, peneliti menggunakan model C. Kemmis dan Robin Mc. Tanggar yang terdiri dari empat kegiatan pokok yaitu perencanaan, pelaksanaan, pengamatan, dan refleksi dalam setiap siklusnya. Subjek penelitian ini adalah peserta didik kelas 4 SDN Koripan 01 yang berjumlah 24 peserta didik. Teknik pengumpulan data dilakukan dengan observasi dengan menggunakan lembar observasi berisikan rubrik penilaian. Hasil dari penelitian menunjukkan bahwa terdapat peningkatan kreativitas belajar pada pembelajaran tematik yang dilakukan melalui model PBL dengan perbandingan antara siklus I ke siklus II yakni meningkat sebanyak 62% dari seluruh peserta didik. Keterampilan berpikir kritis klarifikasi sangat tinggi pada siklus I yaitu mempunyai skor 13% meningkat menjadi 75% dari seluruh peserta didik pada siklus II. Langkah-langkah pembelajaran PBL untuk meningkatkan keterampilan berpikir kritis peserta didik adalah 1) mengorientasikan peserta didik kepada masalah, 2) mengorganisasikan peserta didik untuk belajar, 3) membimbing penyelidikan individu/kelompok, 4) mengembangkan dan menyajikan hasil karya, dan 5) menganalisa serta mengevaluasi proses pemecahan masalah.

Kata Kunci : Keterampilan Berpikir Kritis, Problem Based Learning, Tematik Kelas 4

INTRODUCTION

The implementation of Curriculum 2013 gives significant consequences to the school and the students. There are preparations that must be considered by the school, such as preparing human resources, in this case teachers, student conditioning, as well as provisioning facilities and infrastructure. In learning process, the teacher is not only transferring knowledge as they also have to transfer skills and mold the student's attitude (Suhandi Astuti, 2016: 117). In Curriculum 2013, the learning process is connected between subjects, which is called as thematic learning. In thematic learning, the students' involvement in the learning process is prioritized and there is no split between subjects (Mawardi, 2014: 109-110).

According to the attachment from *Permendikbud No. 22 tahun 2016* about the standard of primary and secondary education process, there are components that should be included in planning the study implementation plan, including school identity, subjects, theme and sub-theme, semester and classes, time allocation, core and basic competencies, indicators, study goals, learning materials, learning method, learning steps, and scoring to measure the achievement result.

There are positive and negative impacts of Curriculum 2013. One of the positive impacts is that the curriculum motivates the teachers to keep updated with various learning model they have learned during Curriculum 2013 training, either by audio visual or concrete media to make the students actively involved in learning inside or outside the classroom. Curriculum 2013 combines various subjects in one learning content as a unity and connects it with experiences in daily life, so that the learning impress the students and is meaningful (Mulyasa, 2014: 3).

Therefore, thematic learning is a learning process where the students have

to be actively involved. The teacher has to transfer knowledge and mold the students' attitude to be better. The learning process experiences various obstacles, one of which is the students' low thinking skills. This obstacle needs to be solved to fulfill the requirement of Curriculum 2013, which asserts the students to acquire various skills, including critical thinking.

Critical thinking skills, or reflective thinking, is an active, persistent, and careful consideration of a belief or supposed form of knowledge in the light of the grounds which support it and the further conclusions to which it tends (John Dewey in Hendra, 2011:129). John Dewey's statement is supported by a statement by Adnyana (2012: 202) that critical thinking skills can be regarded as a high skills which enables the students to do analysis by collecting facts and be able to give arguments and opinion, or to be able to take right decisions. From the statements above, it appears that the students' critical thinking in analyzing on a matter is by supporting truth facts in proving the truth, aside of opinions obtained or arguments.

According to an interview and an observation with Sri Mulyati, the 4th grade homeroom teacher of Koripan 01 Public Primary School, there are 63% of 24 students who acquire high critical thinking skills and 37% of total students acquire low critical thinking skills. The teacher had tried a learning model, yet it is not very conducive as there are many students, resulting to a disruption in the learning process in the class.

In order to solve the problem, the researcher uses Problem-Based Learning model in thematic learning as the solution. This research is conducted to improve the critical thinking skills of 4th grade students of Koripan 01 Public Primary School at the 2nd semester, the academic year of 2018/2019 and to apply Problem-Based Learning model to the students.

METHOD

This research is categorized as classroom action research. The research uses Problem-based Learning model to improve students' critical thinking skills. In Problem-Based Learning, the teacher gives a chance for the students to do an observation, organize the study, analyze the problem, and then discuss the result and analyze the data. All of the steps in Problem-Based Learning model is applied on learning process in the 4th grade, in accordance with the implementation plan made by the researcher.

The subject of this research are 4th grade students of Koripan 01 Public Primary School, Susukan Sub-district. The total respondents are 24 students with different family background, resulting to different pace in absorbing materials given and way of thinking. In this measuring technique, the researcher uses assessment with total of 5 assessment aspects that have been tested for validation using IBM SPSS version 20. The instrument is obtained from critical thinking skills indicators. Each rubric has score 1 to 4 with criteria for each score.

The research also uses teacher observation sheet and student

observation sheet. The content of this observation sheet is the cores of learning implementation, specifically the phases applied in Problem-Based Learning model. This research also uses data analysis technique in the form of comparative descriptive and qualitative analysis. Comparative descriptive analysis is comparing the results between pre-cycle, cycle 1, and cycle 2 to measure and to know the improvement in the students' critical thinking skills.

DISCUSSION

The researcher applies two cycles in this research to fulfill the research objectives: to test the result of critical thinking skills improvement and to apply the steps in Problem-Based Learning model. This research is conducted with a time allocation of 5x35 minutes. The success of Problem-Based Learning model implementation is seen from the comparison between the initial state of learning process to the state after intervention in cycle I and cycle II. There is an improvement in the students' critical thinking skills. The data obtained are illustrated in Table 1 and Table 2, as follow:

Table 1. The 4th grade students of Koripan 01 Public Primary School's critical thinking skills comparison on Pre-cycle, Cycle I, and Cycle II

No	Thinking Qualification	Pre-cycle		Cycle I		Cycle II	
		f	%	F	%	F	%
1	Very High	0	0%	3	13%	18	75%
2	High	15	63%	15	63%	6	25%
3	Low	9	38%	6	25%	0	0%
4	Very Low	0	0%	0	0%	0	0%

Based on Table 1, it is shown that Problem-Based Learning model can improve the students' critical thinking. In the initial state, or referred to as pre-cycle, the 63% of total students, equal to 15 students, are included in "high" category. The 38% of total students, equivalent to 9 students, are under the "low" category. There is no student

whose score achieves the highest category on this cycle. In cycle I, the percentage in "low" category decreases to 6 students (25%), while the amount of students with "high" critical thinking skills stays the same. However, there are 3 students (13%) who perform very high critical thinking on this cycle. In cycle II, there is a significant improvement on

the students' critical thinking skills. There is no student who has low or very low critical thinking as 25% of total students, equal to 6 students, are in the

high level of critical thinking, while 75% of total students, equal to 18 students, are in the very high level of critical thinking.

Table 2. Students' Critical Thinking Skills Score on Cycle I and Cycle II

Critical Thinking Skills Score	N	Min	Max	Mean
Critical Thinking Score Cycle I	24	40	95	61,87
Critical Thinking Score Cycle II	24	70	95	83,12
Valid N (listwise)	24			

On Table 2, the amount of respondents who received interventions stays at 24 students. The minimum score of critical thinking skills in cycle I is 40 and the maximum score is 95, resulting to the average score of 61.87. In cycle II, the minimum score of critical thinking skills is 70 and the maximum score is 95, resulting to average score of 83.12. Based on the data, it can be concluded that there is an increase in the students' critical thinking skills average score, from 61.87 to 83.12.

The result of this research has proven that Problem-Based Learning model improves the students' critical thinking skills, as in the research conducted by Zuliyaningsih (2018). In Zulyaningsih's research, she uses Problem-Based Learning model and there is an improvement in each cycles, which fulfill the standard indicator of success. Problem-Based Learning model is also used by Muchamad Afcariono (2008) on students questioning and answering ability, resulting to an improvement from students' lower ability of questioning and answering (from knowledge, understanding, and application aspects) to higher ability of questioning and answering, or critical thinking (analysis, synthetic, and evaluation).

In the result of the research conducted by Anastasia (2013) about the

implementation of PBL model on improving critical thinking skills and learning outcomes, the initial state of 36 students before the test and non-test experiment in pre-cycle is 60.82 (not critical). The score becomes 74.21 (reasonably critical) in cycle II. Not only does the critical thinking improves, the students' average learning outcomes also improves from the average score of 61.85 in pre-cycle to 80.00 cycle II.

The implementation of a learning model should consider the students' conditions and needs. Besides, an effective academic environment for students is needed in aiding the teaching and learning process for teachers and students (Fadhilaturrahmi, 2018). In addition, the students should have teachers who can give a good learning process. The teachers' understanding on an analysis and the implementation of thematic learning is needed to improve the quality of education (Rizki Ananda, 2018).

The students' activity affects their critical thinking skills during the learning process. If the students acquire high level of critical thinking, they can express their opinions, answer various question, provides arguments and reasons easily, so that the learning proves becomes conducive and achieves learning objectives.

CONCLUSION

According to the discussion, Problem-Based Learning model is proven to be effective in improving the students' critical thinking in thematic learning for 4th grade in Koripan 01 Public Primary School. In cycle I, the minimum score is 40 and the highest score 95, resulting to the average score of 61.87. In cycle II, the average score is improved to 83.12 with the minimum score of 70 and the maximum score of 95, identical to the maximum score in cycle I. Therefore, Problem-Based Learning model can improve the critical thinking skills of 4th grade students of the academic year 2018/2019 in Koripan 01 Public Primary School, Susukan Sub-district.

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