The Implementation of Discovery Learning Model for Improving Thematic Integrated Learning in Primary School

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Abstract: This study aimed to describe the use of a model of Discovery Learning to improve the process of integrated thematic learning in primary schools. This study uses qualitative and quantitative approach to the type of research is classroom action research (PTK). The subjects were teachers and 37 fourth grade students of SDN 04 Birugo Bukittinggi. The results of the study have increased, observations RPP 79.15% the first cycle and the second cycle 94.4%. Aspects of the first cycle teachers 77.65% to 91.6% in the second cycle and the first cycle of students aspects of 79.15%, the second cycle 88.9. Assessment of the students' first cycle that increases in cycle II 71.12 is 81.82. Thus, the model of Discovery Learning can improve the integrated thematic learning process.

Keywords: integrated thematic, learning, discovery learning, primary school

I. INTRODUCTION

Curriculum 2013 based on the opinion drafted future challenges, the challenges of the 21st century marked by centuries of science, knowledge-based society and future competence. Competencies required of students in the 21st century is termed 4C, which is critical thinking, creative and innovative, communicative, and collaborative. Curriculum 2013 is a curriculum that implement an integrated thematic learning. Integrated thematic learning is the use themes to link several subjects so as to provide a meaningful experience to the students. According to Ahmadi (2014:91) the characteristics of thematic learning integrated that is centered on students, providing hands-on experience to students, the separation between subjects does not appear, presents the concept of a variety of subjects in a learning process, is flexible, and learning outcomes can be developed in accordance with the interests and needs of students.

In the process of integrated thematic learning, teachers need to make changes, especially in the use of the learning model (Liu and Wang, 2010). The learning model selected by the teachers is a model that can provide hands-on experience to students, encouraging students to find their own knowledge, through data collection, data processing, and draw conclusions. When students are trained to find their own, the students will be enabled to investigate itself, the results obtained would be loyal and long-lasting in the memory, will not easily be forgotten, and students are able to think systematically, critically and logically (Barreau et al, 2006; Schwartz & Etkides, 2012).

Based on preliminary studies in the fourth grade of SD Negeri 04 Birugo Bukittinggi in the day Wednesday, January 2nd, 2019 at 07.30 am able to conclude, the teacher is less effective in selecting and using learning model. This lack of effectiveness is evident from the following findings: (1) Learning is still centered on the teacher (teacher centered); (2) The teacher has not provided an opportunity for students to find their own (concepts, facts, etc.). (3) The teacher has not stimulate students to think critically in solving contextual problems.

As a result of the above, found students: (1) saturated and less enthusiastic in learning, learning dominated by a few students who are active only; (2) the students just listen to explanations from teachers, so students do not have the ability to investigate and develop own knowledge. Noting the fact that there should be an improvement of learning. One is by using model Discovery Learning According Hosnan (2014:282) "Discovery Learning is a model for developing active student learning with find itself, investigate itself, the results obtained would be loyal and long-lasting in the memory, the student will not be easily forgotten."

Use of discovery learning in thematic learning in accordance with the opinion of Kurniasih and Berlin (2014: 64) that "to implement the curriculum in 2013, which incidentally focused on student activity, then some learning models considered consistent and compatible with the principles of the approach scientific among others: Discovery Learning, Problem Based Learning, Project Based Learning."
Learning to Enhance Integrated Thematic Learning Process in Class IV of SDN 04 Birugo Bukittinggi.

II. METHOD

This study uses qualitative and quantitative approaches. This type of research is classroom action research carried out for two cycles, each cycle consists of a four stages: formulation, implementation, observation, and reflection (Mawardi, 2014). The technique used is the technique of data collection instruments, namely research and test observation sheet. The subjects were teachers and 37 fourth grade students of SDN 04 Birugo Bukittinggi. The research was conducted in January-June semester of lectures and coincides with the second semester of 2018/2019 academic year in elementary school. Precisely on April 13, 2019 which is Saturday 08:00 to 09:10 hours, and then, on 18 April 2019 which is Thursday at 8:00 to 9:45, and the last on 23 April 2019 which is Tuesday at 8:00 to 9:45. Old research is two cycles.

III. RESULT AND DISCUSSION

The preparation of the planning of the first cycle consists of 2 meetings organized by discovery model of learning in the second half of 2013 and based on the curriculum set forth in the plan of implementation of collaborative learning between researchers and teachers of the fourth grade SDN 04 Birugo Bukittinggi.

Implementation according to plan the implementation of the structured learning, integrated thematic learning on research through three steps, namely the preliminary activities, core activities, and activities cover using discovery learning models by Shah (in Kemendikbud, 2014: 32-33), namely: (1) stimulation; (2) The problem statement; (3) the data collection; (4) Data processing; (5) verification; (6) generalization.

Observations were made each cycle, in which the results are based on the observation of the lesson plan the first cycle of 79.15% (B). Based on observations conducted on teacher activity cycle I 77.65% (B) while the student aspect of the first cycle of 79.15% (B). Assessment of the student by using model of discovery learning visits during the learning process takes place. Based on the evaluation process and the learning outcomes of students from the aspect of attitude, knowledge and skills obtained a description of aspects of the attitude, the attitude aspect of student success seen during the learning process takes place. Based on observations of the lesson plan, learning cycle II, obtained the total score of 34 out of a maximum score of 36 with a percentage of 94.4% (AB). Based on observations conducted on the activities of teachers in the learning cycle II, the number of scores obtained 33 out of a maximum score of 36 with a percentage of 91.6% (AB). While aspects of the student, scores obtained 32 out of a maximum score of 36 with a percentage of 88.9% (AB).

From the learning process and results obtained can be described: (1) Aspects of attitude, attitude aspects of student success seen during the learning process takes place during the second cycle is 82.97 with a conversion of 3.43 (B); (2) Aspects of knowledge, the knowledge aspect of student success at this meeting is 81.64 with the conversion of 3.28 (B+); (3) Aspects of skill, the skill aspect of student success at this meeting is 81.01 with a conversion of 3.22 (B+). Thus the recapitulation of the value of all these three aspects is 81.82 with the conversion value of 3.33 (B+).

Based on the results of exposure described above, starting from the first cycle to the second cycle, it can be concluded that an increase in integrated thematic learning assessment results by using a discovery model of learning in the fourth grade students of SD Negeri 04 Birugo Bukittinggi. For more details can be seen in the Figure 1.

![The Score of Three Aspects](image)

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![The Improvement of Integrated Thematic Assessment Learning to Students per Cycle](image)

Research results when viewed from the aspect of planning, implementation of the activities of teachers and students, as well as assessment has increased every meeting that is from the first cycle and the second cycle. Such improvements can be seen in the Figure 2. Based on the data that has been presented on the implementation and observation of actions towards the implementation of thematic learning integrated to improve the learning process by using a model of discovery learning first cycle, the learning has been done in accordance with the step-by-step implementation of the learning model proposed by Shah (in Kemendikbud, 2014: 32-33).

Based on the observation sheet teachers in thematic learning activities integrated to improve the learning process several stages of learning that has not done well, such as the teacher has not provided the motivation for the students study hard. As a result, students become less enthusiastic in learning. As Rusman opinion (2011: 246) that one of the tasks of teachers in the implementation of the discovery model of learning is "teachers must be prepared to be mentors as well tutor for
students who can provide motivation, encouragement, and help in mastering the skills of problem solving."

![The Improvement Results by Observation Lesson Plan, Teacher' Teaching-Activities, Students' Learning Process, and Assessment of Students](image)

During the implementation phase the average percentage of successful activity of teachers in the first cycle gained 77.65% with good qualifications (B) and continued in the second cycle of 91.6% obtained with very good qualifications (AB). While the observation of the activity of the first cycle of students gained an average of 79.15% with good qualifications (B) and then continued in the second cycle gained an average of 88.9% with very good qualifications (AB).

Based on the above description can be concluded that the implementation of the second cycle teachers have been relatively successful by using a model of discovery learning to improve learning in thematic learning integrated in the fourth grade of SD Negeri 04 Birugo Bukittinggi, so that the learning process finished in cycle 2 without continuing to cycle next.

Achievement of the results of the assessment increase in integrated thematic learning process by using a discovery model of learning that teachers include three aspects: the attitude, knowledge and skills. The results of the assessment of students on the aspects of the attitude of the first cycle obtained average value of students, that is 70.73 with the conversion value of 2.64 (B) and continued with the second cycle obtained by the average value of 81 students, 01 with the conversion value of 3.22 (B). According Mulyasa (2014:143), in terms of results, the learning process is successful if there is a positive change in behavior on the self-learners entirely or at least the vast majority (80%). This means that if the results of assessments highlight aspects of attitude exceeds 80%, then reinforced with an average assessment of attitudes, knowledge and skills that have exceeded the mastery learning minimum, it can be said to be successful.

IV. CONCLUSION

Based on the results of research and discussion, we can conclude that the process of integrated thematic learning in the fourth grade SDN 04 Birugo Bukittinggi can be increased by using a model of Discovery Learning. It was because of the characteristics of learning with Discovery Learning models can assist students in finding their own concept and the fact that it needs, so as to increase the interest of students in the learning process.

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