Efforts to Increase Activities and Student Learning Results Using Inquiry Method in Class IV Primary School 060843 Medan

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Abstract. Classroom action research aims to improve the activity and student learning outcomes with the application of inquiry learning methods. The study consisted of 2 cycles of the number of students 25. Collecting data using achievement test, student questionnaire responses, and observations of students in learning activities with the method of inquiry. Data analysis using quantitative techniques and qualitative techniques by linking existing data. The analysis showed: (1) an increase in the activity of the students are in the first cycle of acquisition activity by 61.25% students and 75.63% with enough categories. In the second cycle increased to 92.50% with very good category. (2) an increase in student learning outcomes in the first cycle is the average value of student learning outcomes for cognitive assessment was increased to 82 disiklus 60 to II with the percentage of students who obtained excellent learning predicate 96%. For the assessment of students psychomotor also increased in the first cycle is the highest score obtained by the students increased 3.30 to 3.40 in the second cycle with the percentage of students who received either 72% predicate learning. For the assessment of affective (honest, discipline and cooperation) also increased in the first cycle is 12% to 48%. Based on the above results it can be concluded that the application of the inquiry method can improve the activity and learning outcomes of students in the fourth grade SDN.060843 Medan.

Keywords: Inquiry method, students’ activity, students’ learning result

1 Introduction

Education is a form of dynamic human culture and developmental conditions. Therefore, changes or developments in education are things that should actually happen in line with changes in the culture of life. Changes in the sense of improving future interests. Education that supports development in the future is education that is able to develop the potential of students, so that those concerned are able to face and solve the problems of life they face. Education must touch the potential of conscience or the competency potential of students. The concept of education feels increasingly important when one must enter the life of society and the world of work, because the person concerned must be able to apply what is learned in school to deal with the problems faced in daily life today and in the future. This thinking has the consequence that the improvement or improvement of formal education (school/madrasah) to anticipate future needs and challenges needs to be continuously carried out,
aligned with the development of the needs of the business world / industry, the development of the world of work, as well as the development of science, technology and art.

Improving the quality of education is a process that is integrated with the process of improving the quality of human resources themselves. Recognizing the importance of the process of improving the quality of human resources, the government has and is trying to make it happen through various efforts to develop higher quality education. These efforts include through the development and improvement of the curriculum.

The 2013 curriculum is a curriculum that emphasizes competency with thinking based on attitudes, skills, and knowledge. The most fundamental feature of the 2013 curriculum is to demand the ability of teachers to be knowledgeable and to find out as much knowledge as possible because today's students have easily sought information freely through technological and information developments. Whereas for students more encouraged to have responsibility for the environment, interpersonal, interpersonal skills, and have critical thinking skills. The goal is to form productive, creative, innovative and affective generations.

In the characteristics of the 2013 curriculum, integrated learning curriculum is applied. Integrated curriculum as an integrated thematic role model is one of the learning approaches where the competencies (knowledge, skills, and attitudes) of various subjects are combined into one to form a deeper and fundamental understanding of what students must master. Students are required to be able to construct their knowledge through interaction with objects, phenomena, experiences and their environment. through a scientific approach (scientific approach).

Learning with a scientific approach (scientific approach) is a learning process designed in such a way that students actively construct concepts, laws or principles through observing stages (to identify or find problems), formulate problems, propose or formulate hypotheses, collect data with various techniques, analyzing data, drawing conclusions and communicating concepts, laws or principles that are "discovered". Therefore, learning conditions that are expected to encourage students to find out from various sources through observation, and not just be told.

Thus, the criteria for learning by using the application of a scientific approach are essentially aimed at encouraging and inspiring students to think critically, analytically, and precisely in identifying, understanding, solving problems, and applying learning material, so that the end result is improvement and balance between the ability to be a good human being (soft skills) and human beings who have the skills and knowledge to live properly (hard skills) of students which includes aspects of competency in attitudes, knowledge, and skills.

[1] states, that learning will be more meaningful (Meaningful), if students not only learn to overcome something (Learning to know), but students also learn to do (Learning to do), learn to be animated (Learning to be), and learning to socialize with friends (Learning to live together). In other words, students are given the opportunity to try their own to find answers to a problem, work with classmates, or make things far more challenging and directing students' attention than if students only have to digest the information given in the same direction. For this reason, it is necessary to create a learning environment system that allows the learning process to occur. To achieve these indicators the teacher must be able to choose learning methods that are appropriate to the subject matter and are able to present interesting learning methods.

Many factors that cause low student learning outcomes can come from within the students themselves which are often called internal factors and some are from outside students, namely external factors. Factors that come from within students are abilities, intelligence, attitudes and interests. Factors that come from outside the student are family environment, community
school and one of them comes from the teacher. The role of the teacher in the learning process is very influential. Because the teacher is a student motivator in the lesson. To achieve maximum results, the teacher must be able to choose and adjust the right method with the material presented, so that with such learning will create an active classroom atmosphere, namely the existence of a positive interaction between students and teachers, the state of the active class can produce results satisfying learning obtained by students after learning.

Therefore, it is necessary to have a variety of learning methods so that the learning process is not boring, so that it can attract students' attention to learning and ultimately the quality of learning increases. The use of various methods will not benefit teaching and learning activities if their use is inappropriate and not in accordance with the situation that supports and with the psychological condition of students. The teacher plays an important role in creating conditions that allow students to develop themselves as active students. The ability of teachers to use various methods and learning media is very necessary.

The observations made by researchers at SDN 060843 Medan, showed that there were several problems found during the learning process, such as: 1) the learning methods applied by the teacher were still conventional learning methods such as lecture methods, question and answer and assignments, 2) students do irrelevant learning activities such as drowsiness, playing games, even noisy when learning is taking place, 3) teachers have not yet empowered all of their potential in teaching, so student activities in learning are still very low.

To increase the activity and student learning outcomes in my dream theme in grade IV-3 SDN 060843 Medan required a method that is able to bring change to a better direction, namely the teaching and learning process which includes a process of interaction or reciprocity between the teacher and students in teaching and learning activities. The inquiry method is a form of student-oriented learning method that has differences with conventional methods. The Inquiry Method emphasizes the critical and analytical thinking process to find and find answers to a question in question.

Inquiry method is a learning method that seeks to instill the basics of scientific thinking in students, so that in this learning process students learn more themselves, develop creativity in solving problems. Students are truly placed as learning subjects. The role of the teacher in learning with the inquiry method is as a mentor and facilitator. The teacher's job is to choose the problems that need to be conveyed to the class to solve. But it is also possible that the problem to be solved is chosen by students. The next task of the teacher is to provide learning resources for students in order to solve problems. Teacher guidance and supervision is still needed, but intervention in student activities in problem solving must be reduced [2].

Inquiry method is one of the effective learning methods applied to the scientific approach, because in the learning steps in this study include observing, questioning, collecting data, processing data, and communicating. By using this learning method in the classroom, students can form a mindset, reasoning, present students' conceptual and procedural knowledge, and form interactions between teachers and students, students with students. Thus, if the theme of my dreams is learned by the method of inquiry, it is hoped that it can increase student activities and learning outcomes. The need for the use of varied learning methods and various learning media is expected to improve the quality of learning.

Thus, based on the background of the problem above, the formulation of the problem in this study are: 1) Does the application of the inquiry method improve student learning activities on the theme of the beauty of my country in grade IV primary school 060843 Medan?

2) Does the application of the inquiry method improve student learning outcomes on the theme of the beauty of my country in grade IV primary school 060843 Medan?
The purpose of this study is: 1) Improving the learning activities of the fourth-grade students of primary school 060843 Medan on the theme of the beauty of my country through inquiry method. 2) Improving the learning outcomes of grade IV students of primary school 060843 Medan on the theme of the beauty of my country through the inquiry method.

1.1 Review Of Literature

1.1.1 Learning Results

According to Bloom in Max [5], there are 3 abilities expected by students as learning outcomes, namely:

1. Cognitive Domains are behaviors related to knowledge, memory, understanding, explaining, describing, planning, assessing, and applying.
2. Affective Domain is a behavior related to the attitude of receiving, responding, assessing, organization, and characteristics.
3. Psychomotor Domain is a behavior that is related to skills or skills related to physical.

The learning process is the stages that are passed in developing one's cognitive, affective and psychomotor abilities, in this case the ability that must be possessed by students or students. Learning outcomes are a series of abilities that students want to achieve that include aspects such as the following: (1) memorization (C1) namely the ability to retract information stored in long-term memory. This category includes 2 types of cognitive processes namely recognizing and recalling; (2) understanding (C2) is the ability to construct meaning and understanding based on the initial knowledge possessed or to integrate new knowledge into the schemes that are already in students' thinking. Understanding categories include 7 cognitive processes which are interpreting, exemplifying, classifying, summarizing, drawing inferior, comparing, and explaining; (3) applying (C3) that is the ability to use a procedure to solve a problem or do a task. This category includes 2 cognitive processes namely running (executing) and implementing (implementing); (4) analyzing (C4) namely the ability to describe a problem or object to its elements and determine how the interrelationships between these elements. There are 3 types of cognitive processes that are included in the analysis, namely decipher (differentiating), organizing (organizing) and finding the implicit message (attributing); (5) evaluate (C5) that is the ability to make a consideration based on existing criteria and standards. There are 2 kinds of cognitive processes that are included in evaluating namely checking and critiquing; (6) make (C6) the ability to combine several elements into a form of unity. There are 3 types of cognitive processes that are included in this category, namely generating, planning, producing.

1.1.2 Learning Activity

Activities are all types of activities carried out by students in learning with the purpose of behavioral change, both regarding knowledge, skills and attitudes, both covering all aspects of organism or personal. So, in principle learning is doing to change behavior. There is no learning if there is no activity. That is why activity is a very important principle or principle in teaching-learning interaction.

Student activity is the involvement of students in the form of attitudes, thoughts, attention, and activities in learning activities to support the success of the teaching and learning process and benefit from the activities. Increased student activity is the increasing number of students asking and answering, the increasing number of students interacting with each other discussing learning material. Learning strategies must be able to encourage student activity.
The activity is not intended to be limited to physical activity, but also includes psychic activities such as mental activity [3].

The activeness of students in the learning process will lead to high interaction between the teacher and students or with the students themselves. This will result in a fresh and conducive classroom atmosphere, where each student can engage as much as possible. Activities that arise from students will also result in the formation of knowledge and skills that will lead to increased achievement. Dierich in [4] classifies activities as follows:

1. Visual activities such as reading, watching pictures, and demonstrations.
2. Oral Activities such as stating, formulating, asking questions, giving suggestions, issuing opinions, conducting interviews, and discussing.
3. Listening Activities such as listening to descriptions, conversations, discussions, music, speeches.
4. Writing Activities such as writing stories, essays, reports, questionnaires, copying.
5. Drawing activities such as drawing, making graphics, maps, diagrams.
6. Motor activities such as conducting experiments, making construction, repairing, playing, gardening, raising models.
7. Mental activities such as responding, remembering, solving problems, analyzing, seeing relationships, making decisions.
8. Emotional activities such as interest, feeling bored, happy, excited, brave, calm, and nervous.

1.2 Inquiry Method

Inquiry learning methods basically include the desire that learning should be based on student questions. Learning wants students to work together to solve problems rather than receive instruction directly from the teacher. The teacher is seen as a facilitator in learning rather than a vessel in knowledge. The teacher's work in the environment of inquiry learning is not to offer knowledge but to help students during the process of seeking their own knowledge.

The use of inquiry learning methods in learning is based on constructivist views. According to constructivist views, learning is a process of knowledge formation. This formation must be done by the learner (student). Students must be active in carrying out activities, actively thinking, drafting concepts and giving meaning about the things being learned.

<table>
<thead>
<tr>
<th>Step</th>
<th>Activities Info</th>
<th>Teacher Activities</th>
<th>Student Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>The teacher gives explanations, instructions or questions about the material to be taught. Before starting the teacher's lesson the teacher must understand the extent to which students have a perception of the material. Then the teacher and students together compare perceptions with various opinions or theories that already exist.</td>
<td>Students listen carefully to the teacher's explanation</td>
<td>Students listen carefully to the teacher's explanation</td>
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<tr>
<td>Formulate the problem</td>
<td>The teacher brings students to a problem or problem that contains a puzzle. The problem presented is a problem that challenges students to solve the problems or problems that the</td>
<td>Students try to solve the problems or problems that the teacher's explanation</td>
<td>Students try to solve the problems or problems that the teacher's explanation</td>
</tr>
<tr>
<td>Step</td>
<td>Description</td>
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<tr>
<td>think about solving the puzzle.</td>
<td>students are encouraged to find the right answers.</td>
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<tr>
<td>submit a hypothesis</td>
<td>The teacher gives a temporary answer to a problem that is being studied.</td>
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<td>Students record important things</td>
<td>given by the teacher in order to solve the problem.</td>
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<tr>
<td>Collecting data</td>
<td>The teacher asks questions that can encourage students to think about finding the information needed.</td>
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<tr>
<td>Students answer the questions</td>
<td>given by the teacher and start looking for more clear and correct information to solve the problem given by the teacher.</td>
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<tr>
<td>Test the hypothesis</td>
<td>The teacher determines the answers that are considered acceptable according to the data and information that students have obtained based on data collection</td>
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<tr>
<td>Students listen to the teacher's</td>
<td>explanation of the data they have obtained.</td>
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<tr>
<td>Formulate conclusions</td>
<td>The teacher invites students to summarize in the form of formulations as conclusions that can be accounted.</td>
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<tr>
<td>Students record the results of the conclusions given by the teacher.</td>
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</table>

2 **Methodology**

This type of research is Classroom Action Research (classroom action research) which is a form of research conducted by the teacher to improve the learning process which consists of planning (plan), action (action), observation (observation), and reflection (reflection). Subjects in this study were students in grade IV-4 of SD Negeri 060843 Medan, amounting to 25 people, consisting of 15 women and 10 men. Data collection techniques used are by using learning outcomes tests (THB), and observation of student activities.

3 **Result and Discussion**

The general purpose of this study is to obtain information about student learning activities and student learning outcomes using inquiry methods. Specifically, the objectives to be achieved in this study are (1) knowing how to increase student learning activities and student learning outcomes by using the inquiry method. The theme presented in this study was "The
beauty of my country" with the sub-theme "The beauty of historical heritage" in class IV SDN 060843 Medan.

The results of the study presented in this chapter include the results obtained by students from the assessment aspects of cognitive (knowledge), affective (attitude) and psychomotor (skills) of cycle I and cycle II. The results of the assessment are in the form of students' ability in completing practice questions about the theme being taught (cognitive), students' behavior during the learning process (affective), and students' skills in making assignments given by the teacher (psychomotor) using the inquiry method.

The description and interpretation of data from the results of the first cycle and second cycle research are described in the table below:

| Table 1. Obtaining Average Class Values for Cognitive, Affective and Psychomotor Students |
|-----------------------------------------------|-----------------|-----------------|-----------------|
| No. | Average value of Cycle I | Average value of Cycle II |
|     | Cognitive | Affective | Psychomotor | Cognitive | Affective | Psychomotor |
| 1   | 2,48      | 2,58      | 2,34        | 3,17      | 3,33      | 3,24        |

Based on the table above, it can be seen that the test results of students' abilities for cognitive, affective, and psychomotor domains, in the first cycle have not reached the maximum set value of 2.66. In the second cycle there was an increase with the class average reaching 3.00. The percentage of completeness achieved by students from cycle I to cycle II is 0.75%. Thus it can be concluded that, student learning outcomes through inquiry methods have increased. For assessment of student activities can be seen in the table below:

| Table 2. Results of Student Activity Assessment |
|-----------------------------------------------|---------------------------------|-----------------|-----------------|
| Assessment Criteria | Cycle I | Cycle II |
| Percentage of average score | Meeting 1 | Meeting 2 | Meeting 3 |
| Les | Enough | Very good |

In the table above, it can be seen that there is an increase in student activity from cycle I to cycle II. In cycle I meeting 1 assessment criteria was still lacking with a score of 61.25 and at meeting 2 the assessment criteria became sufficient with a score of 75.63. In the second cycle the assessment criteria became very good with a score of 92.50. Thus it can be concluded that the overall student activity shows an increase in better activity and in general students reach all indicators with good assessment.

4 Conclusion

Based on the results of the research and discussion described above, some conclusions can be obtained as follows:

a. The learning process carried out by the teacher on the theme of "the beauty of my country" sub-theme "the beauty of historical relics" in grade IV-4 SDN 060843 Medan by using the inquiry learning method can be seen from the teacher's activities in learning the theme increased. This can be seen in the first cycle of meetings 1 and
2 at 71.43% and 77.76% with enough categories. In the second cycle of meeting 1, it increased to 92.38% with a very good category.

b. Student activity in learning with the theme of the beauty of my country the sub-theme of the beautiful heritage in class IV-4 SDN 060843 Medan by using the inkuri learning method has increased. This can be seen in the first cycle of meeting 1 at 61.25% with less categories and at meeting 2 at 75.63% with enough categories in cycle II of meeting 1 at 92.50% with very good categories.

c. Student learning outcomes in learning the theme of the beauty of my country the sub-theme of the beautiful heritage in class IV-4 SDN 060843 Medan by using the inkuri learning method also increased. This is seen from the percentage increase in the number of students who have increased in obtaining the final predicate. The percentage of students in cycle I who received a very good predicate (SB) was 12% while in cycle II it increased to 48%. In the predicate of good (B) is 20% and in the second cycle increased to 36%. For the predicate enough (C) was 52% and in the second cycle decreased to 12% and for the predicate less (D) was 16% and decreased to 4%.

References


