Improving Science Learning Outcomes Using Inquiry Based Learning Contextual Learning Models in Class V SDN Paku Alam Banjar Regency

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ABSTRACT

The objectives of this study are: 1) to find out how the activities of teachers in implementing the Inquiry based learning learning model at SDN Paku Alam, Banjar Regency, and 2) Knowing how the students' learning outcomes in science follow using the Inquiry based learning learning model at SDN Paku Alam, Banjar Regency. The subjects in this study were all students at SDN Paku Alam, Banjar Regency. The sampling technique used was purposive sampling totaling 12 students of class V. The data mining tool used was a test. Data analysis used indicators of success: 1) Teacher activity reaches a good category if it reaches 71 and 2) Students' science learning outcomes are said to be good if mastery reaches 80% of the number of students. Based on data analysis, it is concluded 1) the use of Inquiry based learning in class V at SDN Paku Alam, Banjar Regency, cycle I was in the good category with a percentage of 84.21% and increased in the second cycle to 89.47% in the very good category, and 2) The results of learning science class V at SDN Paku Alam, Banjar Regency, cycle I. 65% and increased in the second cycle to 84.16%.

Keywords: Improvement, Contextual Learning Model Type Inquiry Based Learning, Science Learning Outcomes

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1.   INTRODUCTION

Law Number 20 of 2003 concerning the National Education System states that education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, as well as the skills needed by himself, society, nation and state (Santika, 2021:5). Education is a conscious effort to prepare students to play an active and positive role in their lives now and in the future. Education is the process of forming fundamental skills intellectually and emotionally towards nature and fellow human beings. Thompson (Mikarsa, 2007:3) which states that education is the influence of the environment on individuals to produce permanent changes in habits, thoughts, attitudes and behavior. In line with this view, Crow and Crow (Mikarsa, 2007: 3) argue that it must be believed that the main function of education is guidance for individuals in an effort to fulfill their needs and desires in accordance with their potential so that they obtain satisfaction in all aspects of their social life.

The teacher's role is very important, apart from being a teacher, as well as guidance and education. Cheah in Selamat et al (2011:62) states that:

"the roles of teachers and students are mutually completing each other. The key role teachers are to translate the contents into a form of information that the students can understand through a series of appropriate learning activities".

The roles of teachers and students are complementary in the learning process, where the role of the teacher is to translate content into information form to understand the learning material through a series of appropriate learning activities. But in reality that role is often forgotten. Education and teaching is done simply to provide information (Santika, 2022;16). That's what makes students feel bored, so learning does not attract students' interest, and ultimately has an impact on low learning outcomes.

The use of media in the learning process is very helpful for the success of learning. Through the media, students can use their senses (Berta & Swarniti, 2020). The more senses students use, the easier what they learn will be accepted and remembered. In fact, this issue has not received the attention of teachers.

In general, the teaching and learning process for science at SDN Paku Alam, Banjar Regency is only teacher-centered. As a result, the teaching and learning process emphasizes more on students who tend to be less active in learning. Currently, there are many teachers who have mastered learning strategies and models, but the reality in the field, there are still many teachers who in teaching still seem to only carry out their obligations, many lectures (telling methods) and do not help the development of student activities.

Based on the results of observations and surveys in class V of SDN Paku Alam, Banjar Regency, it was found that the selection of learning models was not appropriate and there was a lack of habit of sharing information with classmates. These weaknesses resulted in relatively low learning outcomes for fifth grade students. Science learning outcomes obtained only reached 50% so that they were below 80% classical completeness with minimum completeness criteria (KKM) 70. Teachers who have not used media in providing material and are still using the lecture method.

The low score of students in learning science at SDN Paku Alam, Banjar Regency needs a solution, so the action that will be taken by researchers to improve and provide alternative solutions for low science learning outcomes is to generate student motivation by applying appropriate learning models. Inquiry-based learning contextual learning model is one of the contextual learning models that emphasizes learning activities for students and facilitates students to ask questions, conduct investigations or searches, experiment and research independently to get the knowledge they need. Kusmaryono & Setiawati (2013:137) Inquiry Based Learning type contextual learning model is an approach used and refers to a way to question, seek knowledge (information), or study a symptom (Lede & Swarniti, 2020). Learning with the IBL approach always strives for students to be mentally and physically active. The material presented by the teacher is not simply notified and accepted by students, but students are endeavored in such a way that they gain various experiences in order to "find themselves" the concepts planned by the teacher.

Inquiry-based learning contextual learning model directs students to be able to find out for themselves the material

presented in learning by asking questions and independent investigations and can stimulate the brain to develop patterns that embody meaning by connecting academic content with the context of students' daily lives. and students can learn through experience not memorizing, because knowledge is not a set of facts and concepts that are ready to be accepted, but something that must be constructed by students (Santika, 2020:16).

Inquiry-based learning contextual learning model is also referred to as a teaching technique in which the teacher involves students in the learning process through the use of asking questions, problem solving activities, and critical thinking. Rahayu (2018:177) The task of the teacher in this question-based learning environment is not to provide knowledge, but to help students go through the process of finding the knowledge they seek for themselves.

Inquiry Based Learning is usually in the form of collaborative work. The class is divided into small groups. Each group is given a question or problem that will lead all group members to work together to develop a project based on the question to find the answer. Because inquiry-based learning is question-based, the teacher must prepare open-ended questions so that students can develop their minds. Students should be given the opportunity to try to find their own concepts being taught (Wahyuni dkk, 2022:40). Moreover, if students are also given the opportunity to measure their own learning progress, this will help them to improve their learning outcomes.

Park (2012: 101) "... it has various activities for learning by doing that include competitive, rules, challenge, goals, curiosity, feedback, interaction, interest, fantasy, motivation, flow, control, and narrative". Learning activities include competitive, rules, challenges, goals, curiosity, feedback, interaction, interest, fantasy, motivation, flow, control and narrative. So, the essence of learning outcomes is a change in behavior from the results of interactions with other individuals or the environment which includes aspects of knowledge (cognitive), attitudes (affective) and skills (skills). Learning outcomes show the actual abilities of students who have experienced the process of transferring knowledge from someone who can be said to be mature or have less knowledge. So with learning outcomes, teachers can find out how far students can catch, understand, have certain subject matter. On that basis, educators can determine better teaching and learning strategies. Furthermore, Keshavars (2011: 2), states "Learning outcomes focus on the measurable cognitive, behavioral and attitudinal development of students as they interact with a learning activity". Learning outcomes focus on the measurable cognitive, behavioral and attitude development of learners as they interact with activities.

2.   METHODS

According to Sugiyono (2016: 2) the research method is a scientific way to obtain data with certain goals and uses. This study uses a qualitative approach through the method of Classroom Action Research (CAR). A qualitative approach is a research procedure that produces descriptive data in the form of written or spoken words from people and observed behavior. This study is intended to provide information on how to take appropriate

action to improve student learning outcomes through the inquiry based learning model. This research was conducted by the teacher in his own classroom through self-reflection, with the aim of improving his performance as a teacher.

The research was conducted at SDN Paku Alam, Banjar Regency. The subjects of this study were the fifth grade students of SDN Paku Alam, Banjar Regency, totaling 12 students and the fifth grade teacher of SDN Paku Alam. The object of research or target in this research is the improvement of science learning outcomes for ecosystem materials using an inquiry-based contextual learning model at SDN Paku Alam, Banjar Regency. Furthermore, this study took a sample of 12 students of class V SDN Paku Alam, Banjar Regency. Sampling using purposive sampling technique, namely sampling deliberately and with certain considerations. While the data mining tool uses tests, observations, interviews and documentation. The analysis technique used is descriptive percentage. The research data analyzed include the class average, individual learning completeness and classical learning completeness.

3.   RESULT AND DISCUSSION

Cycle I Research Results
a. Observation of Teacher Activities Cycle I

Based on the results of observations of the learning implementation process that has been carried out by observers using an inquiry-based learning type learning model that has been carried out for 2x35 minutes, it can be seen that the teacher's observations get a percentage of 84.21% with good

qualifications, where the implementation of learning activities is still not effective as there is still a score of 2 on checking each group to provide reinforcement and feedback both verbally and in motion on student work. So it can be concluded that the teacher's activities are good with the results of the observation of teacher activities showing 84.21%.

b. Observation of Student Learning Activities

Based on the data that has been obtained from the observation of the observation sheet in the first cycle, the student learning activities can be seen that the first cycle in the aspect of cooperation is 66.67%, in the activity of expressing opinions 75% and answering questions 75%. So that it can be concluded that student learning activities that take place only reach 72.22% and show active qualifications. Based on the table, it can be seen that the percentage of student learning activities in the first cycle as much as 72.22% are in the Active qualification

c. Student Science Learning Outcomes

Based on the data obtained from the science learning outcomes for the ecosystem material in cycle 1, the average result is only 65% consisting of 6 students who complete according to or more than the predetermined KKM, while 6 other students are still incomplete or have not reached the KKM limit for learning outcomes. Science of Ecosystem material so that from these results it is concluded that it will be continued to cycle II with various learning evaluations based on the results of learning Science of Ecosystem material in cycle I.

Cycle II Research Results.
a. Observation of Cycle II Teacher Activities

Based on the results of observations of the learning implementation process that has been carried out by observers using the Inqury based learning learning model that has been carried out for 2x35 minutes, it can be seen that the teacher's observations get a percentage of 89.47% with very good qualifications, where the implementation of learning activities has got a good score and very good. good. So it can be concluded that the teacher's activities in using the inquiry based learning model can increase the activity of the fifth grade teacher at SDN Paku Alam, Banjar Regency.

b. Observation of Student Learning Activities

Based on the data that has been obtained from the observation of the observation sheet in cycle II, the student learning activities can be seen in the aspect of cooperation 83.33%, in the activity expressing opinions 91.67% and answering questions 91.67%. So that it can be concluded that the student learning activities that took place reached 88.89% and showed the very active qualification
So it can be concluded that there was an increase in the achievement of student activities on ecosystem material using the inquiry based learning model, namely 88.89% in cycle II. Based on this, the inquiry based learning model can increase the activity of fifth grade students at SDN Paku Alam, Banjar Regency.

c. Students' Science Learning Outcomes

Based on data obtained from the table of science learning outcomes for ecosystem materials in cycle II, the average result is only 84.16% consisting of

10 students who complete according to or more than the predetermined KKM, while 2 other students are still incomplete or have not reached the KKM limit. learning science material Ecosystem, so from these results it is concluded that the learning outcomes of science class V students using the inquiry based learning learning model have met the criteria for completeness of more than 80% of the total number of students completed, therefore the meeting cycle is not continued anymore. Based on this, the results of learning science on ecosystem materials using an inquiry-based learning model can improve science learning outcomes for class V SDN Paku Alam, Banjar Regency.

Discussion

Based on the data obtained through the results of observations of teacher activities in learning, student learning activities and student learning outcomes by applying the inquiry based learning model which increases in each cycle, it can be described as follows:

a. Observation of Teacher Activities in Learning

Learning activities by applying a cooperative approach to the type of inquiry-based learning learning model are said to be effective, because they can increase the results of learning science on ecosystem materials to the maximum and the teacher is able to maximize all planned activities, although there are improvements during the learning process using the inquiry-based learning model. At the next meeting, improvement efforts were made to improve the results of learning science on Ecosystem material by improving the process of teaching and learning activities.

TABLE I
Comparison of Teacher Activities Cycle I and Cycle II

Cycle	Percentage	Qualification
I	84,21%	Good
II	89,47%	Very Good

Based on the table, it can be seen that the activity of teachers in teaching and learning activities has increased, it can be seen in the first cycle the percentage score obtained is 84.21% with good qualifications. While in cycle II the percentage score obtained reached 89.47% with very good qualifications. Learning activities are essentially a series of student and teacher activities in achieving learning objectives. In this series of activities it is possible to foster one, two or more aspects of the process skills of students (Hairuddin, et al, 2007: 2.9). During teaching and learning activities the teacher tries to maximize so that the teaching and learning process can take place effectively and maximally, but at meetings There are several aspects of teacher activities that have not been implemented properly. So that the deficiencies in the first cycle can be overcome by the teacher in the second cycle with mastery of the material and class management as well as good time. So in cycle II it was considered successful and could increase student activity in writing skills.

b. Observation of Student Learning Activities in Learning

Based on the observations of student learning activities when following the lessons of cycle I and cycle II, the comparison can be seen in the observation of learning activities in the following table:

TABLE II
Comparison of Student Learning Activities Cycle I and Cycle II

Cycle	Percentage	Qualification
I	84,21%	Active
II	89,47%	Once Active

Based on the table data above, it is known that student activity from cycle I to cycle II continues to increase. It can be seen in the percentage value in the first cycle reaching 72.22% with active qualifications. Meanwhile, in the second cycle, it reached 88.89% with active qualification once. So it can be said that in the second cycle, the students' learning activities in following the learning process were active. Skills learning activities focused on the learning experience through the movements of the students. This learning activity is a combination of motion, stimulus, and response that is incorporated in the learning situation. These three elements foster coordinated movement patterns in students. Skills learning activities occur if students receive a stimulus and then respond by using motion (Suprijono, 2010: 8). Furthermore Hartinah, (2010:134) The force that drives individual activities is called motivation, which indicates a condition within the individual that encourages or moves the individual to carry out activities to achieve a goal.

c.Student Learning Outcomes

Student learning outcomes in cycle I and cycle II are presented in the following tables and graphs:

TABLE III
Comparison of Average and Complete Learning Outcomes Cycle I and Cycle II

Student Learning Outcomes	Cycle I	Cycle II
Completeness	65%	84,16%

In the first cycle, it was seen that students still did not get the results of learning science, which was expected to make it difficult for students to learn the subject matter, and some students still looked embarrassed to come to the front of the class. So that the student's science learning outcomes have not run optimally.

The teacher reflects on these problems by motivating students to be able to improve student learning outcomes even better, the teacher provides understanding and direction to students who do not understand learning, besides that the teacher can also control the class and manage time well. Furthermore, the teacher also always gives prizes to students who are active and disciplined in the online learning process. According to Sabartiningsih et al., (in Hartini & Ramadhani, 2022:22) Reward is a way for someone to reward someone who does the right thing (Sabartiningsih et al., 2018), so that students can return to being enthusiastic about doing certain tasks and be more motivated to do something else and the process is better. In the implementation of the first cycle on student learning outcomes the percentage reached 65% with details of only 6 students who completed and 6 students scored below 70 in the incomplete category. While in the second cycle the percentage achieved increased to 84.16% with details of 10 students who scored above 70 in the complete category, while only 2 students scored below 70 in the complete category. Learning outcomes are influenced by the experience of students as a result of interaction with the physical world and its environment. A person's learning outcomes depend on what is known about learning concepts, goals and motivations that affect interactions with the material being studied (Suyono & Hariyanto, 2011: 127). Improved learning outcomes are also marked by changes in student behavior as a whole, during learning and in groups. Thus, classroom action research with the application of an inquiry-based learning model can improve science learning outcomes for class V ecosystem materials at SDN Paku Alam, Banjar Regency.

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