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The Effect of Project-Based Learning (PjBL) Based Audio Visual Media to Improve the Learning Outcomes of Grade VI Students of SD N 056613 Gemi Beach

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ABSTRACT

The research using the Influence of Audio Visual Media based on Project Based Learning (PjBl) is to improve students' critical thinking skills on the ecosystem subtheme on the learning outcomes of the science material "The Influence of Human Activities on Ecosystem Balance" through audio visual media in class VI SDN 056613 Pantai Gemi. This research data was obtained from the results of the classroom action research method (Classroom Action Research) carried out by the teacher in class VI with a total of 40 students, where the research was carried out through the stages of recording, carrying out actions, observing and reflecting. The results obtained from this research are an increase in science learning outcomes in class VI SDN 056613 Pantai Gemi. In cycle I, student learning outcomes were 65%. In cycle II 75% of student learning outcomes had achieved what was desired. Data obtained from the results of observations of teaching teachers which have been carried out by observers have increased in cycles I and II. The percentage of implementation from 75% in cycle I increased to 95% in cycle II. In cycle I, the implementation indicators reached 75% of the 11 indicators implemented. . The implication of the results of this research is that using audio visual media based on Project Learning (PjBl) can be used as a means to increase learning motivation and science learning outcomes in the material Influence of Human Activities on Ecosystem Balance for class VI elementary school 056613 Pantai Gemi.

Key Word *PjBL, Audio Visual Media, Learning Outcomes*

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INTRODUCTION

Schools as educational institutes are obliged to equip knowledge, skills and attitudes through subjects. One of the learning activities that can encourage, challenge and attract students' interest is the subject of natural sciences (IPA). In learning science, the method used in its application must go through a reasonable learning process, in accordance with the reality and characteristics of the child. Natural Sciences are inseparable in human life. Activities carried out by humans are always confronted with

natural knowledge. If humans know Natural Sciences correctly, then there will be no mistakes in interpreting natural phenomena. By understanding Natural Science, humans will avoid misperceptions about natural phenomena that occur. Science education is expected to be a vehicle for students to learn about themselves and nature

Given the importance of science in human life, a correct understanding of the concept is very necessary. With the correct understanding of the concept, every natural event that occurs will be responded to scientifically. Scientific responses do not occur suddenly, but must go through a process that requires learning. Learning about nature through a series of processes that are quite long. In learning science, the method or method used in its application must go through a reasonable learning process, in accordance with reality and with the characteristics of the child. Natural sciences is one of the main subjects listed in the basic education curriculum. By mastering science, children will experience simple and complex natural phenomena in elementary school in science learning, students still lack understanding of simple and complex natural phenomena around them.

To provide such a learning experience, teachers need tools such as movies or learning media used by teachers in teaching and learning activities. One of them is audio visual media. This of course applies to all fields of study taught in schools, especially science subjects. Especially in the material The Influence of Human Activities on Ecosystem Balance. An ecosystem is a place to give and receive each other between living things and their environment. Ecosystems are made up of biotic and abiotic components. Biotic components consist of plants and animals. While the abiotic component consists of rocks, soil, water, rivers, and others. In an ecosystem, green plants play the role of producers. Explanations using the lecture method are not suitable to be used in explaining Ecosystem material in grade VI of SD N 056613 PANTAI GEMI. This kind of activity can be boring and less attractive to students' motivation in learning, researchers see that the learning process that has been carried out so far has not been successful and in accordance with expectations. During learning, students' concentration is not centralized, students are less active in participating in lessons, and are not enthusiastic in answering questions asked by teachers. The learning process makes students not interested in learning, tends to create a boring and static atmosphere. Therefore, children find their own busyness in the midst of the ongoing learning process, for example chatting with their friends, disturbing their friends with nosy behavior and others that cause learning to be no longer conducive. Researchers feel that such a learning process is not in accordance with the needs to achieve the learning goals of Ecosystem science materials and student learning outcomes are still relatively low, because the media used in the learning process is not appropriate. This can be addressed in Table 1. below:

Table 1.
Learning Outcome Data of Grade VI Students of SD N 056613 PANTAI GEMI in academic year 2023/2024

No	CLASS	KKM	Jumlah Siswa	
			Finish	Not Finish
1	Grade 6th Elementary School	65	30(75 %)	10(25%)

With such a monotonous process of teaching and learning activities, the learning outcomes of class students VI SDN 056613 PANTAI GEMI. in the field of science study in the first semester about the material Influence of Human Activities on Ecosystem Balance, describing the level of students' understanding and mastery of the subject matter still has not reached the KKM (Minimum Completeness Criteria) score, which is 65. Therefore, in the learning process, facilities and infrastructure are needed as supporting tools. Media can also make learning more interesting and fun. The learning media that is currently developing is audiovisual media. Audio-visual media is media that has sound elements and visual elements that can be seen, for example video recordings, slides, sounds, and so on. In learning activities, teachers are required not only to have knowledge about media, but also to have the skills to choose and use the learning media well. According to William Burton, in choosing teaching aids to be used, the following should be considered: (1) teachers must make systematic teaching preparations; (2) the learning process must be of high quality as shown by the delivery of meters by teachers in an orderly manner using various variations in delivery, be it media, methods, sound or motion; (3) the length of the teaching and learning process is used effectively; (4) teachers' teaching motivation and students' learning motivation are quite high; (5) the interactive relationship between teachers and students in the classroom is good so that any learning difficulties can be overcome immediately. Likewise, the five aspects of learning are said to be effective if they can be carried out well, then an effective learning will be realized.

Learning that uses varied media will also be more meaningful so that children do not feel bored in thinking and learning. In fact, in elementary schools, researchers see that science learning, especially about the ecosystem, is less successful in achieving KKM values, Because in their learning students tend not to pay attention to the teacher's explanations, students look bored with the material presented, so students are less excited, do not answer questions from the teacher, students' learning concentration is not centralized, so the researcher, Taking reference to previous research that is relevant to the material of the Sulistyani Research Journal "Improving Science Learning Outcomes through Audio Visual Media in Class IV Sdn Manggarai 09 Morning South

Jakarta".Learning outcomes have improved after teachers use audio visual media. The improvement in learning outcomes is also followed by an increase in student absorption in receiving lessons. As well as increasing the percentage of Minimum Completeness Criteria (KKM) in grade VI elementary school SDN 056613 PANTAI GEMI. Therefore, the researcher conducted research using Audio Visual media to improve student learning outcomes on the material "The Influence of Human Activities on Ecosystem Balance" which is similar to previous research, the researcher will develop Audio visual media based on Project Based Learning. The purpose of this study is to find out to improve the critical thinking skills of students of the ecosystem subtheme in the science learning results of the material "The Influence of Human Activities on Ecosystem Balance" through audio visual media in grade VI of SDN 056613 PANTAI GEMI.

Project Based Learning (PjBL) is an effective learning to develop science process skills (KPS) and science literacy knowledge of students, Tasiwan (2015). So that students can be involved in the creation of projects and cause students to be able to find facts, concepts and theories with their own process skills and scientific attitudes.

RESEARCH METHOD

This research method uses the Classroom Action Research method. The purpose of the research is to improve critical thinking skills of the ecosystem subtheme in grade VI students of SDN 056613 PANTAI GEMI for the 2023/2024 school year. The population and research sample in grade VI elementary school with a total of 40 students. The location of the research is in Jl. TS. Muhammad Syeck, Gemi Beach, Stabat District, Langkat Prov. North Sumatra Through the implementation of the Project-Based Learning (PjBL) model assisted by audio-visual media in learning. The design of PTK procedures carried out in this study uses of model Stephen Kemmis and Taggart. An overview of the flow between step one and the next step in each cycle is depicted in the form of a PTK chart as shown in Figure 1 below:

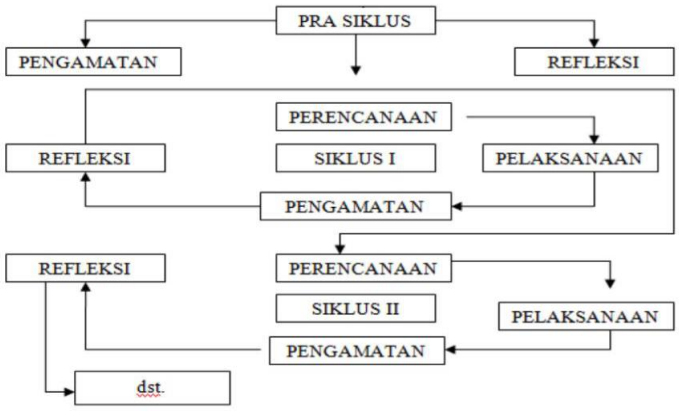

Figure 1.
PTK According to Kemmis and Mc Taggart in Arikunto (2017)

Data and Data Sources

This research data consists of observation data and research data. Both data are data used to control the suitability of the implementation of actions with the plan and final results. There are two sources of data in this study, namely: (1) activity monitoring data sources, (2) research data, namely the learning outcomes of grade VI students of SDN 056613 Pantai Gemi.

Data collection is carried out in each cycle starting from the beginning to the end of the 1st cycle action until the last cycle. To collect data using several techniques, namely observation, documentation (photos), field defects (researcher notes) and a test of the final results of science learning at the end of each cycle.

The analysis was carried out to determine the improvement of student learning outcomes in science learning, as a result of the use of audio-visual media in learning. If the results of the study show a decrease or have not reached the established standard, then re-planning is held in the next cycle. On the other hand, if it has improved or has reached the predetermined standard, the researcher and the research team agree if the research is successful or does not require the next cycle. The technique of determining minimum completeness criteria refers to the learning completeness criteria that have been set in a basic competency, which is between 0 to 100%. The researcher calculated the learning outcomes of students in science learning in grade VI by measuring the percentage of the stages studied in each cycle. If all students get a minimum score of 70, then the action is declared sufficient. This percentage describes the manifestation of student mastery regarding student learning outcomes and mastery of the concept of science.

RESULT AND DISCUSSION

The data of this research was obtained from the results of classroom action research carried out in class VI with a total of 40 students. In the implementation of classroom student training. The teacher delivers the material using the lecture method During the learning period, students only listen to the explanation from the teacher and then they do the evaluation given by the teacher. The learning results obtained are also not satisfactory. Judging from learning, there are still many students who do not understand and understand the material explained by the teacher. In addition, the evaluation results were not satisfactory because there were still many students who got a score below the KKM, which was 60 that had been determined. The results of science learning about the skeleton of the human body at VI SDN 056613 PANTAI GEMI in the pre-cycle are 55% which have reached the KKM score. For this reason, it is necessary to carry out pre-action treatment. Pre-Action treatment can be seen in Table 2 below:

Table 2.
Pre-Action

Data Types	Number of Students	Pre-Action Percentage	
		Science Learning Outcomes	Action
Niai > 65	40	55%	60 %

Learning in cycle I by students watching a show about "The Influence of Human Activities on Ecosystem Balance". After the researcher carried out the learning activities together, they reflected on the results of the activity by discussing and asking questions In the formation of the working group and the atmosphere in the classroom was orderly and conducive, because students enjoyed watching movies from VCD. When students watch the movie from the VCD, the students seem enthusiastic and enthusiastic, but are still confused to take note of the important things that must be watched from the VCD which according to the students is too fast, the teacher's efforts are to stop the show for a moment and give the opportunity for students to take notes, and replay the movie from the VCD. In group discussions, students still do not dare to express their opinions in answering questions from other groups. The efforts made are to provide motivation and enthusiasm to students to always be confident in answering questions or expressing their opinions. . The meaning contained in the grades obtained by these students shows that the learning outcomes of "Ecosystem" in the classroom at VI SDN 056613 PANTAI GEMI have increased slightly and are quite even, but still not in accordance with the expected target This is because students have not been able to fully adjust to using audio-visual media. This means that classroom action efforts are still needed to improve the learning outcomes of the human body skeleton through audio visual media at VI SDN 056613 GEMI BEACH. In the implementation of actions carried out in cycle I, it is produced in two meetings, both research data and action monitoring data, so it can be described that research data is result data evaluasi given to students at the end of the first cycle, which shows 28 students who have reached KKM with as much as 69% while the target required is that all students achieve KKM. Likewise, the results of monitoring actions against teachers show 75%, which means that the way teachers teach using audio-visual media as a support in the teaching and learning process is not optimal. For more clarity, it can be seen in table 2.4 Based on the results of reflection and data analysis above, a revision was held in cycle II. In Table 3 below:

Tabel 3.
Cycle I Percentage

Data Types	Number of Students	Presentase Siklus I	
		Science Learning Outcomes	Action
Score > 65	40	69 %	75 %

Based on the results of the first cycle with two meetings and the problems found, namely that teachers in carrying out learning actions are still not in accordance with the plan made, teachers are too dominating in learning so that they are less active. The material in cycle II discusses "Ecosystem".In this second cycle of research, students watched a film from VCD about "Ecosystem" and its functions (duration 15 minutes), and recorded important things. Then the teacher provides guidance and observation of the students. then the teacher held oral Q&A classically and individually. Observation and observation are carried out directly during learning activities. From the attachment assisted by the observer in cycle II, it can be seen that there is a good development, students have begun to get used to group discussions that discuss a material, although at the time of delivering the results of the discussion, students are still not very fluent but still better than in cycle I. Students have also become accustomed to making conclusions without relying entirely on the teacher because the teacher only guides the students. Students look happy and enthusiastic in participating in lessons, especially when using audio-visual media. In this case, there is an increase in students' science learning outcomes.

Reflection is carried out after the researcher carries out the learning activity, at the same time the observer makes observations, then the researcher and observer together reflect on the results of the activity by discussing and asking questions. The atmosphere in the classroom was orderly and conducive, because students enjoyed watching movies from VCD. When students watched the VCD show, the students seemed excited, and were no longer confused to note the important things that must be listened to from the VCD show. In group discussions, students are brave enough to amaze their opinions and answer their parties to other groups. From the actions taken, two pieces of data were produced, namely research data and research data monitoring data, which are the results of the evaluation of science teaching, namely all students achieve KKM. Similarly, the results of monitoring from the observation of teaching teachers show that 95% means that they have achieved what has been determined, to make it easier to data the results of the second cycle with Table 4 below:

Education Achievment : Journal of Science and Research
Volume 5 Issue 2 July 2024
Page 558-568

Table 4.
Cycle II Percentage

Data Type	Number of Students	Presetase Siklus II	
		Learning Outcomes IPA	Actions Implemented
Score > 65	40	78 %	95 %

Data Validity Examination The purpose of conducting data validity checks in this study is to obtain data that is in accordance with the predetermined targets Data examination in this study uses data that is carried out by discussing with peers. This data examination discussion was carried out with the aim of increasing the degree of trust in the data obtained by the researcher by taking actions and re-observations, namely repeating the activities carried out because there was data obtained in the first cycle of actions that were still inaccurate. The science learning results in this activity are carried out by checking data obtained through several sources. In the study, we checked and matched data obtained through peers in the form of field notes and audio-visual media observation sheets in the learning process as support, documents in the form of photos and the acquisition of learning outcome scores and monitors. After the results of the evaluation are assessed, the scores of children who reach KKM are grouped. So this data obtained based on the evaluation to students can be seen in Table 4.4 Percentage of Research Results below:

Table 5.
Presentation of Research Results

No	Siklus	Learning Outcomes	Actions Implemented
1	Pra Penelitian	55 %	60 %
2	Siklus I	69 %	75 %
3	Siklus II	78 %	95 %

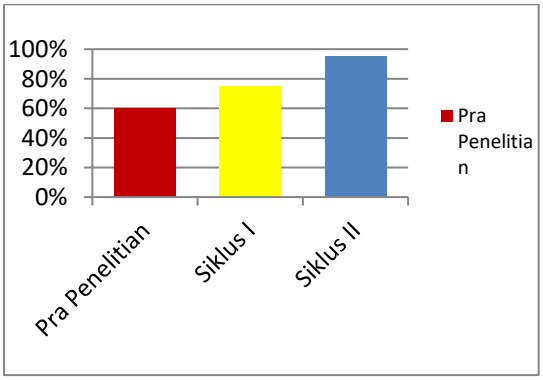

Figure 2.
Action Results

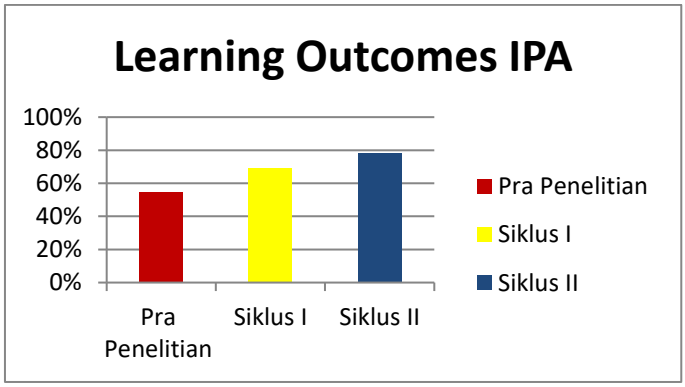

Figure 3.
Learning Outcomes Natural Science

In the Pre-Research in the first cycle, a percentage of 55% was obtained, increased in the first cycle to 65%, but in the first cycle it still did not reach the KKM, meaning that the learning outcomes had not been achieved because the target needed was that all students achieved the KKM score. In the second cycle it increased to 79%, all students achieved the KKM score, which means that there has been a peak increase in the second cycle where all students have reached the predetermined KKM score. The data obtained from the results of the observation of teaching teachers that have been carried out by observers has increased and the first and second cycles The percentage of implementation increased from 75% in the first cycle to 95% in the ll cycle implemented, there is the first cycle obtained indicators of implementation reaching 75% of the 11 indicators implemented. In the second cycle, the indicators implemented reached 95% of the 14 indicators implemented. This gives an idea that the increase in science learning outcomes through audio-visual media turns out to be an increase from cycle I to cycle II. This increase shows that the identification of research analysis with collaborators has found findings of problems that occur in the cycle and have been found to solve them and show results in accordance with the target.

CONCLUSION

The conclusion of this study is that the data from the pre-research results, the actions of the first and second cycles showed an increase in students' science learning outcomes in each cycle. In the Pre-Research in the first cycle, a percentage of 55% was obtained, increased in the first cycle to 65% because the target required was that all students achieved KKM scores. In the second cycle it increased to 79%, all students achieved the KKM score, which means that there has been a peak increase in the second cycle where all students have reached the predetermined KKM score. The data obtained from the results of the observation of teaching teachers that have been carried out by observers has increased and the first and second cycles The percentage of implementation increased from 75% in the first cycle to 95% in the ll cycle implemented,

there was the first cycle obtained indicators of implementation reaching 75% of the 11 indicators implemented. This gives an idea that the improvement of science learning outcomes through audio-visual media turns out to be an increase from cycle I to cycle II. This increase shows that the identification of research analysis with collaborators there are findings of problems that occur in the cycle and solutions have been found and show results in accordance with the target. Science learning about the Influence of Human Activities on Ecosystem Balance using audio visual media can help improve the learning outcomes of human body skeleton students in grade IV of elementary school. Audio-visual media can be used for learning which is an important factor in achieving success. Fun activities in learning the human skeleton, supported by aids in the form of voice recordings and images of the human skeleton, can increase students' interest and attention to the human skeleton lesson. To improve the results of science learning about "The Influence of Human Activities on Ecosystem Balance", it is by using the following steps: (1) Students watch shows about the skeleton of the human body and record important things. (2) Then, after the students finish watching, the teacher holds a question and answer session with the students both individually and classically about the show they watched to find out the extent of the material they absorbed from the show they watched. (3) Students discuss and record the results of their discussion to be read in front of the class and conclude them together. By doing these steps, students can easily understand and remember the subject matter. Continuously in realizing the lesson on "The Influence of Human Activities on Ecosystem Balance", teachers need to provide time to prepare broadcast materials on "The Influence of Human Activities on Ecosystem Balance". If this can be fulfilled, it will greatly help optimize students' knowledge about "The Influence of Human Activities on Ecosystem Balance".

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