

# Utilization of Power Point Media in Natural Science Learning

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**Abstract.** This study aims to describe the use of Power Point media in science learning in class VI elementary school Inpres Kampung Baru Merauke, where Power Point has not been used as a medium that can help improve student learning outcomes. The research method used is classroom action research. The data collection technique used is the observation technique carried out during the research in cycle I and cycle II. Data analysis techniques are quantitative and qualitative techniques. Quantitative techniques to process quantitative data from test results. While the qualitative technique is to analyze non-test qualitative data. Based on this research, it can be concluded that (1) the application of using Power point learning media can improve student learning outcomes (2) Science learning using Power Point media is very effective in helping students understand science learning materials

**Keywords:** Use of power point media, Science learning, Elementary school students

## 1 Introduction

Learning is a mental process that is seen in student learning activities [1]. The learning process is designed in such an interesting way that it can create activeness, attention, motivation, and stimulate students' passion in learning. Interesting and effective learning requires teacher creativity in determining methods, technical approaches and media that can help channel the learning message to the recipient of the message, namely the student [2] [3].

Problems experienced by students in participating in learning such as lack of attention, enthusiasm, and passion for learning, the teacher can choose suitable methods, strategies and media to encourage students' interest in learning [4]. Power point is an interactive presentation learning media. Based on observations made at SD Inpres Kampung Baru, it is known that the process carried out only uses lecture and assignment methods and uses teacher and student books.

Inpres Kampung Baru Merauke Elementary School is a school located on the outskirts of Merauke City where almost 100% of the students are local people around the school, so there needs to be a special effort in mentoring learning that uses appropriate and simple learning technology to be able to improve students' abilities in terms of knowledge, affective and psychomotor so that it can be applied in everyday life. According to research conducted, it is stated that learning by utilizing power point media is very effective and can improve student learning outcomes. The consequences of teachers still using lecture methods in learning and using teacher books and student books are:

(1) students tend not to focus on learning because they are very verbalistic and abstract (2) do not stimulate students to learn independently (3) do not provide the same stimulation in the learning process.

Efforts to improve the quality of learning is one of the most important things that must be considered in the learning process so that it can improve the quality of education. This is a school task and especially for teachers as teaching staff who also determine the improvement of satisfactory learning outcomes [5]. Teachers in designing learning must be creative and innovative in learning so that students are able to understand the material presented and are active in following the learning process, so that the learning carried out is of high quality and the achievement that students want to achieve is satisfactory. Models, strategies and methods as well as techniques and power point learning media are expected to be the right solution in overcoming the problem of low student learning outcomes [6]. The creativity of teachers in utilizing strategies, methods and models as well as learning media is very beneficial for the effectiveness and improvement of student learning outcomes [7]. Teachers are required to design learning messages and channel messages in the teaching and learning process which are expected to lead to two-way or reciprocal communication between teachers and students, and can achieve learning objectives that are not only teacher-centered but can also be student-centered.

Power point learning media can function as a stimulus to thoughts, feelings, attention and motivation as well as interest in clarifying the subject matter [8]. Power point interactive learning media is one of the

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most important elements in the learning process that contains messages that will be conveyed to students in the form of tools, people and teaching materials, besides that learning media is one way to motivate and communicate with students to be more effective in learning process [9]. In the era of technological progress and development, it is time for the use of teaching aids such as audio, visual, and audio visual tools and school equipment adapted to these developments.[10]. The selection of learning tools must be adjusted to the demands of the curriculum in accordance with the materials, methods, and level of student learning abilities in order to achieve the learning objectives. The power point learning media is used by the teacher as a tool to make it easier to convey the content of the subject matter and be able to improve student learning outcomes.

Mathematics learning for some students, especially elementary school students, is a subject that is considered difficult and less interesting, even on the other hand it creates excessive fear for students [11]. Another problem that is often encountered in science learning in elementary schools is that there are still very few teachers using interesting strategies, methods and models as well as media in delivering learning materials. The results of the interview revealed that learning science at the Inpres Kampung Baru elementary school for students was considered difficult because of the lack of adequate learning media to explain a concept outside the practicum and observation can make it difficult for students to understand the concept so that it is not uncommon for students to understand outside the learning concept in accordance with the learning objectives.

Based on the results of interviews with the fourth grade science teacher at SD Inpres Kamung Baru, the attention, motivation, interest and activity of students during learning took place very less and learning outcomes in science were low. This can be seen from the number of students who do not pay attention to the teacher such as playing, telling stories with friends in class or daydreaming. In addition, the results of an interview with one of the students stated that science teaching was considered a difficult subject to understand, so the practice questions given by the teacher were always difficult to answer because they did not understand so that it had an impact on low student learning outcomes. This phenomenon is a struggle in the field that many students do not have the desire to participate in the learning process because teachers are less able to convey subject matter so that students find it difficult to understand what the teacher explains.

Education that supports development in the future cannot be separated from the current learning process which is related to success in improving the quality of graduates, which can be seen from student learning outcomes which are the result of the student learning process which is influenced by many factors. One of the factors that influence learning outcomes is student interest in learning. So students' interest in learning is one of the most important factors in achieving good learning outcomes. If in the learning process there are students who are less interested and which affects the

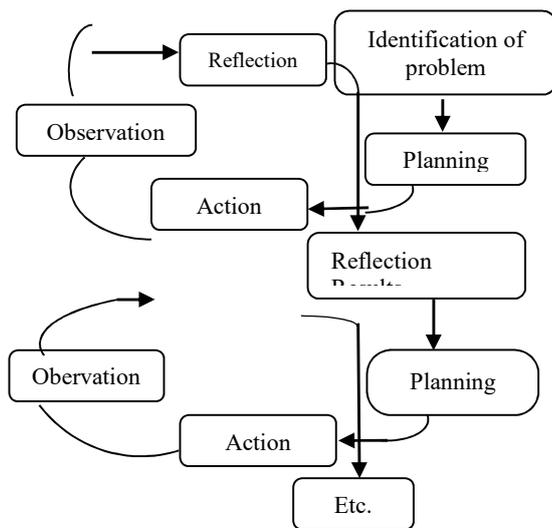
focus of attention and motivation, it is sought to have greater interest and motivation by means of methods and media are important keys that make subject matter fun to learn [12]. In this case, it is the teacher who plays the main role for it, the teacher who can design learning messages and present teaching materials in an interesting way. One of the reasons for low student learning outcomes can be identified because of the low quality of learning in the classroom. In this case, it can be seen from the average value of science lessons at Inpres Kampung Baru elementary school for the 2022 school year. Teachers have enormous influence and responsibility in motivating students' learning and success so that teachers are expected to have creativity in designing interesting learning that stimulates passion for learning, attention, interest and motivation as well as independence in the learning process.

Based on the description of the problem, the purpose of this study is to describe and explain how based on this research it can be said that the application of Power point learning media can improve student learning outcomes and science learning by using Power Point media is very effective in helping students understand science learning materials [13].

## 2 Research Methods

The research used is classroom action research. According to suharsimi et al. Classroom action research is research that describes the cause and effect of treatment, as well as describes the entire process from the beginning of the treatment to the impact of the treatment. Learning outcomes [14]. The data collection technique used is the observation technique carried out during the research in cycle i and cycle ii. Data analysis techniques are quantitative and qualitative techniques. Quantitative techniques to process quantitative data from test results. While the qualitative technique is to analyze non-test qualitative data. The kkm for science learning at the inpres kampong baru elementary school is 65.

The indicator of this research is that the number of students must be at least 80% of the total number of students who have completed classically (achieve a score more than or equal to the kkm, which is 65) and 80% of students reach the minimum activity category either and the effectiveness of using power pint media reaches a minimum of 80%. For more details regarding the design of classroom action research and or the design of the research cycle consisting of planning, action, observation, and evaluation and reflection, see the following chart.



**Fig. 1** Adaptation of Classroom Action Research Design Model Kemmis and MC Taggaret.

### 3 Results and Discussion

Based on the results of this study. (1) The application of using Power point learning media can improve student learning outcomes (2) Science learning using Power Point media is very effective in helping students understand science learning materials. These results are obtained based on student learning outcomes during the learning process and documentation of student work during learning in class. The results of this study are as follows.

Based on the results of research in the pre-cycle learning cycle on plant and animal breeding material when the teacher has not used power point media [15], it can be seen that there are still many students who have not completed, namely 80% of students have not achieved the success criteria according to the Minimum Completeness Criteria or 9 students while those who did not complete 50% or 9 students. Students are less involved in the learning process and lack of motivation in the learning process. In the first cycle of learning using power point media, it was clear that there was a very significant increase in learning outcomes, student learning activities increased and student interest in learning was also clearly seen in the percentage of mastery learning. Students who complete 77.78% or 14 students while students who do not complete 22.22%.

If it is seen from the results of the first cycle of learning in accordance with the results of the presentation of learning mastery, it can be concluded that the application of the use of power point learning media can improve student learning outcomes but has not reached the classical minimum score of 80%, so the trial continues in the cycle. Student learning outcomes in cycle II showed very significant progress because it turned out that 94.45% of students completed or 17 students, while those who did not complete or nearly finished were 5.55% or only 1 student. The results of the

study prove that learning science using power point media is very effective in helping students understand science learning material as seen from the increase in learning outcomes that have increased from pre-cycle, cycle I and cycle II with very good results and only 1 (one) person only students who did not or almost completed. The application of power point learning media can improve student learning outcomes and is very effective in helping students understand science learning materials.

### 4 Conclusion

The results showed that from the beginning of learning conditioning, namely in the pre-cycle without using Power point learning media, 50% were completed while 50% were not completed, it was clear that learning that did not use success media was below classical success, namely in the good category of 80%. Improved learning outcomes occur when conditioning learning using power point media, namely in the first cycle, students who complete 77.78% or 14 students with effectiveness and generate 80% student activity in good category learning. Student learning outcomes in cycle II showed very significant progress because it turned out that 94.45% of students completed or 17 students, while those who did not complete or almost completed were 5.55% or only 1 student. Science learning using Power Point media was very effective. assist students in understanding science learning materials. The results show that the application of using power point learning media can improve learning outcomes and is effective in stimulating interest, motivating and generating student learning activities [9].

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