

USING IMAGE MEDIA TO IMPROVE STUDENT LEARNING OUTCOMES IN SCIENCE LEARNING FOR CLASS VI ELEMENTERY SCHOOL STUDENTS

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ABSTRACT

The purpose of writing this article is to determine the use of image media to improve student learning outcomes in science learning in grade VI elementary school students. This study uses a type of classroom action research (CAR) where researchers and students are directly involved during the teaching and learning process. This research was conducted as a process of studying learning problems in the classroom that were not specifically arranged for research purposes, but CAR took place in real situations and conditions without being engineered. Therefore, the fairness of the class in the research process is a characteristic of classroom action research. This research cycle consists of 4 cycles, namely planning, action, observation, and reflection. The results of this study show that teacher activity in using image media in science learning in cycle I obtained a score of 75% (Good), in cycle II obtained a score of 92.85% (Very Good). Based on the data above, it can be seen that teacher activity in implementing learning using image media in science learning has increased so that it reaches the maximum limit. Student activity in learning using image media in science learning in cycle I obtained a score of 60% (Good), in cycle II obtained a score of 93.33% (Very Good). Based on the data above, it can be seen that student activities in implementing learning using picture media in science learning can achieve perfection with the achievement of a very good predicate. Based on the results of the final test conducted, the learning outcomes of grade VI students have increased. In cycle I, student learning outcomes only reached 60%, this has not achieved classical student learning completion. Students who achieved completion were 12 people and 16 people did not complete. In cycle II, student learning outcomes increased to 85.70% in this cycle, student learning outcomes reached the maximum limit and had achieved classical completion.

Keywords: *Picture Media, Students, Science Learning*

INTRODUCTION

One of the important things that must exist in human life is education. If there is no education, then the life that is lived will be in the same place or can be called undeveloped. Education is something that is inseparable from character. Because it is impossible for education to be separated from what is called character, because this is what can shape behavior. Education is a pillar in the progress of a nation, the better the quality of education in a country, the better the quality of its children. Educational institutions, namely schools, have very large duties and responsibilities in carrying out the mandate of education. Schools function to lead students to the learning process with guidance and supervision from teachers. Learning is an education that is carried out in a process. Education is very important for human life, through education a person gains experience, knowledge, and understanding of how to behave better. The Ministry of Education and Culture says that education is an effort that realizes an active learning process, can develop potential and improve student learning outcomes.

The teacher's job to determine strategies, approaches, methods, learning resources and media so that students are active in the learning process to improve student learning outcomes. Education cannot be separated from the content of science lessons which are one of the lessons that study the state of nature, living things and also human life (Sahyar et al., 2020). Schools as educational institutions have full duties and responsibilities in carrying out the mandate of education (Olsson, 2020). Schools are institutions designed to bring students into the learning process, under the supervision of teachers (Sari et al., 2023); (Musdiani et al., 2019). Education in schools is carried out in a process called learning (Lestari & Surya, 2017); (Education, 2019). Learning is a relatively permanent change in behavior as a result of reinforced experience or practice (Giovannini, 2019). Learning is the result of the interaction between stimulus and response. While learning is the process of interaction between students and educators and learning resources in a learning environment. Learning is a learning environment system consisting of: learning objectives, learning materials, teaching and learning activities, methods, media, learning resources, and evaluation (Volume et al., 2020).

In order to improve student learning outcomes, teachers must always try with various strategies, including using effective and enjoyable learning media for students (Permana & Indihadi, 2018). Learning media is a means for teachers to facilitate the delivery of knowledge to their students (Wahyuni et al., n.d.). Learning media is also a means for students to facilitate the achievement of desired learning outcomes (Rahmatillah et al., 2022). The right learning media will make students more motivated, more active, and

easier to digest the knowledge given by their teachers during the learning process, and make the learning process more enjoyable (Sari, 2023). Learning is a common thing in everyday life, even learning can happen anywhere and anytime, but there are still people who misinterpret learning as a general activity such as a child who is told by his mother to study (Hartanto, 2016). Of course, this understanding is an inaccurate understanding. Learning is not just an activity of ordering a child to study to study. As we all know, learning has the goal of forming a person to be better than before. Of course, many questions will arise if we do not understand the meaning of learning in depth. Basically, learning has a very specific meaning (Mastiah et al., n.d.).

Learning is the association of new knowledge to the cognitive structure that the learner already has (Ningtiyas et al., 2019). This means that in the learning process, students will connect the knowledge or science that has been stored in their memory and then connect it with new knowledge (Safitri & Subayani, 2023). In other words, learning is a process of changing performance that is not limited to skills, but also includes functions such as skills, perceptions, emotions, thinking processes, so that it can produce improved performance (Arfiansyah et al., 2019). The teacher's task in learning is to make students learn through the creation of interesting and meaningful learning strategies and environments. Learning can be said to be successful if students can receive and master the material well (Daulai et al., 2023). Natural Sciences (IPA) is a science that has objects using scientific methods, which is a basic aspect that needs to be taught in Elementary Schools (Rahma, 2019). In science learning, there are many or many abstract concepts that are difficult to imagine or visualize in the mind. Many students who are studying science directly work using formulas, without trying and trying to learn and understand the philosophical background or underlying concepts. Based on this, learning media can make abstract concepts concrete. Meanwhile, learning media can also make the teaching and learning process more interesting through the combination of various media and development techniques. Increasing and developing students' interest in learning through the development of learning media is the right choice in optimizing the learning process (Abi Hamid et al., 2020).

The role of students learning like scientists means that the science learning process includes a science process skills approach (Yusnita et al., 2023). Science process skills are categorized into two parts, namely basic skills and integrated skills. For elementary school level, it is expected to master basic science process skills that can be developed in the science learning process (Wulandari et al., 2021). This is because the cognitive abilities of elementary school students cannot be compared with the cognitive structure of researchers. Therefore, students must be given the opportunity to

practice science process skills that are adjusted to the level of cognitive development of elementary school students.

Amin et al. (2006: 1) state that basic skills consist of several things including: 1). Observing. Observing is the process of using the senses to capture an object and event, as well as its characteristics (in the form of notes); 2). Classifying. Classifying is the process of grouping objects and events based on their differences and similarities which are applied in the form of lists, tables and graphs; 3). Measuring. Measuring can be interpreted as an activity of comparing an unknown quantity with a set standard (unit of length, time, temperature); 4). Concluding. Concluding means making a conclusion resulting from observation data. 5). Predicting. Predicting is something that is not yet certain and has not been proven with the belief that what will happen is based on understanding and knowledge, observations and conclusions that have been obtained. 6). Communicating. Communicating can be expressed in writing or orally and is usually presented in the form of reports, pictures, graphs, and tables.

Learning outcomes that must also be developed and mastered in science learning are students' scientific attitudes. As previously mentioned, scientific attitudes that can be developed by students include attitudes that always prioritize evidence, are flexible, creative, critical, diligent, open, and sensitive to the environment. This attitude is not only developed during the science learning process, but most importantly, up to the stage of knowing but also up to the stage of applying. Currently, almost all citizens receive science education, but in reality, the learning outcomes obtained do not show the entire learning outcomes in accordance with the goals achieved. A simple example is after students know that plants are very beneficial for human life, then if the students understand the importance of the benefits of plants for humans, they will automatically be aware that they will not damage plants but will try to plant plants instead of doing activities such as stepping on them. Basic science process skills and scientific attitudes need to be developed and trained. Therefore, learning is needed that not only students act as recipients but students must also experience themselves based on their experience in understanding the knowledge, so that in the end it can be applied in everyday life. Science learning is also directed to improve students' thinking skills through problems faced by students so that they are accustomed to thinking and behaving scientifically. BSNP (2013) states that science learning should be carried out through scientific inquiry to improve the ability to think, work and behave scientifically and communicate it as an important element of life skills. Therefore, science learning in elementary schools/Islamic elementary schools emphasizes students' direct learning experiences through the application and development of scientific attitudes and science process skills.

Piaget in Desmita (2011) stated that students' cognitive development is at the concrete operational stage requiring direct experience of objects. Direct experience plays an important role in encouraging the rate of students' cognitive development at this stage. Students experience for themselves what will be learned so that direct experience is what makes learning more meaningful and will be better understood by students. Furthermore, according to Samatowa (2011), learning models based on direct experience can improve children's memory and are relatively inexpensive. This is because in the learning process, it uses learning tools and facilities owned by the children themselves. Learning is an activity that involves someone in an effort to gain knowledge, skills and positive values by trying to gain knowledge, skills and positive values by utilizing various sources for learning by involving educators as facilitators and students as learners (Rohani, 2019). Science learning is one of the compulsory subjects that must be mastered by students. This is because in its learning it provides students with an understanding that is directly related to everyday life. Science learning is the main learning that students learn during their education from elementary school to high school to live their future lives, which contains natural sciences in everyday life. By knowing the scientific phenomena that occur in the surrounding environment, we can solve existing problems with the scientific skills that have been mastered. Science learning provides opportunities for students to improve their curiosity skills through the process of scientific thinking about natural phenomena that occur in everyday life (Handayani & Puryatmi, 2022).

The subject of science learning, students are given experience to learn, plan and conduct scientific investigations, develop reasoning skills, and use knowledge that has been mastered, so that new creativity emerges to solve scientific problems. Natural Science (IPA) learning is active learning that involves student activity in understanding and developing knowledge. Students are expected to be active in searching for and finding concepts, dare to speak to convey ideas, be able to listen and accept other people's ideas, be able to analyze a problem, be active in discussions, and be able to write down work results. Based on the 2013 curriculum, the purpose of science learning in elementary schools is to require students to be able to find and do something. One of the aspects of basic skills in elementary schools is developed in science subjects. Science lessons in elementary schools should be able to be implemented effectively and efficiently, oriented towards the learning objectives that have been set. This is due to the broad scope of the science material studied. (Matsuri, et al., 2022). Media is a connecting tool that is able to connect or communicate, therefore media is something important for smooth learning, that media is a tool to provide stimulation for students in the learning process (Hartono, 2007). The use of appropriate media with the learning material delivered can stimulate students to be able to follow the learning process well. Media can also increase student learning motivation,

stimulate learning activities and can improve students' abilities regarding the information listened to (Briggs in Rudi, & Riyana, 2009). Learning media is considered important, because the delivery of material becomes clearer, and students will find it easier to understand the material and the messages conveyed in learning can be expressed through learning media (Utami, 2020).

In general, media has benefits for teaching, it will attract more students' attention so that it can foster learning motivation, learning materials will have clearer meaning so that they can be better understood by students, and allow students to master learning objectives better, learning methods will be more varied, not merely verbal communication through words spoken by the teacher so that students do not get bored and teachers do not run out of energy, and students do more learning activities, because they do not only listen to the teacher's explanation, but also other activities such as observing, doing, demonstrating and others (Daryanto, 2013).

Learning media can be applied to science learning, one of which is at the Elementary School level. Science learning is an important lesson, as a provision of knowledge or foundation for students to the next level. Events about nature are poured into science learning (Sulistiyorini, 2007). Acquiring an understanding of nature, the ability to think, work and behave scientifically can be done in science learning (Rozie, 2013)

Picture media is media in the form of pictures without accompanying sounds. This media is usually used for learning in all aspects of language skills, including speaking skills. Picture media is divided into two, namely still picture media and moving picture media. Examples are illustrations, selected pictures, transparent picture pieces, projectors and cartoon pictures, and others. The function of picture media in the teaching and learning process is to develop picture skills, develop children's imagination, help improve children's mastery of abstract things or events that cannot be presented in the classroom, develop student creativity. (Lino, 2015). Learning media can be applied to science learning, one of which is at the Elementary School level. Science learning is an important lesson, as a provision of knowledge or foundation for students to the next level. Events about nature are poured into science learning. Gaining an understanding of nature, the ability to think, work and behave scientifically can be done in science learning. Using picture media is a strategy that is in accordance with science learning. Where with picture media invites students to observe events related to nature through pictures. With the presence of media, it can help maximize student learning outcomes. Image media plays an important role in learning process activities. Messages conveyed through image media through the sense of sight. (Utami, 2020).

The use of image media in learning at the Elementary School level has many significant benefits in supporting the student learning process. One of the main benefits is increasing the appeal of learning through attractive visualizations, such as the use of colorful cartoon images that can arouse students' curiosity. Image media can also help students understand abstract concepts in a more concrete way, so that the information conveyed is easier to understand and remember.

In addition, image media can stimulate students' critical and creative thinking skills. With images, students can be invited to analyze, describe, or even tell stories based on the visualizations provided. This is also very useful for training students' speaking skills, where they can learn to convey ideas or opinions in a structured manner based on the images observed. Furthermore, image media can also support collaborative learning.

In group activities, students can discuss the images provided, exchange ideas, and build shared understanding. This not only increases student participation but also hones their social skills. By preparing images in an organized and relevant manner to the material being taught, image media can be an effective and enjoyable learning tool, which ultimately supports the improvement of students' interest and overall learning outcomes. (Yunita, 2022)

Based on the results of observations conducted by researchers, in general, the science learning process carried out by grade VI students is still low. We can see this from the small percentage of student graduation that has been determined. The Criteria for Achieving Learning Objectives is 75% as determined at school.

Table 1.1 Data of Initial Test of Grade VI

No	Value	Kriteria	Students
1	≥ 75	Completed	12
2	≤ 75	Not Completed	16
			28

The low learning outcomes of students are caused by some students learning mathematics is very boring and less interesting for students so that when the science learning process is taking place, students are not serious in listening to the explanation given by the teacher so that the learning outcomes obtained by students in science learning are relatively low because some of the students' learning outcomes have not reached the KKM.

Based on the results of observations, it can be seen that the problem faced in science learning for grade VI students is the low interest in learning students, especially in science subjects. This is because the method used is the lecture method, which makes students bored in learning the lesson. In addition, in science learning, teachers have not used varied media so that it does not attract students' interest in learning the material in the lesson. Based on these problems, the researcher used image media to improve the learning outcomes of grade VI students. Image media can be observed directly using visuals so that students find it easier to understand what is being learned.

METHODS

This study uses classroom action research (CAR) where researchers and students are directly involved during the teaching and learning process. This research was conducted as a process of studying learning problems in the classroom that were not specifically regulated for research purposes, but CAR took place in real conditions and circumstances without engineering. Therefore, the fairness of the class in the research process is a characteristic of CAR. Classroom Action Research can be interpreted as a process of studying learning problems in the classroom through self-reflection in an effort to solve the problem by carrying out various planned actions in real situations and analyzing each influence of the treatment. There are basically 4 stages in the CAR cycle, including; Planning, Action, Observation, and Reflection.

The source of data collection comes from the results of observations in the form of data collection techniques by observing each ongoing event and recording it with observation tools such as checklists, tests used in data collection are in the form of multiple choice objective questions, interviews and also literature books Reviews and journals related Inductively. This inductive analysis is used to find the realities as contained in the data and can make the relationship between the researcher and the respondents more explicit, recognizable and accountable. The source of this research data is the informant. In addition, this research is also conducted by direct observation..

RESULTS AND DISCUSSION

The research was conducted in the odd semester of 2024/2025 in November 2024 in class VI. This research was carried out in 2 cycles, cycle I was carried out on Thursday, November 22, 2024 and cycle II was carried out on Friday, November 8, 2024. The researcher also gave cycle test questions in each research cycle given to students to see the extent of students' understanding of the material that had been taught so that researchers were able to measure the extent to which students' learning outcomes in mastering the material.

Classroom action research conducted by the teacher, namely the teacher opens the learning by greeting, the teacher invites students to pray before the learning begins, the teacher manages the class by doing icebreaking before the learning begins, the teacher provides apperception in the form of trigger questions, the teacher provides motivation to students before the learning begins, the teacher conveys the learning objectives, the teacher explains the material, the teacher forms study groups, the teacher distributes LKS to students, the teacher directs students to complete the LKS, the teacher provides reinforcement for the LKS presented by students, the teacher concludes the learning material, the teacher conducts an evaluation, the teacher reflects and recalls, the teacher invites students to pray before ending the learning, the teacher ends the learning.

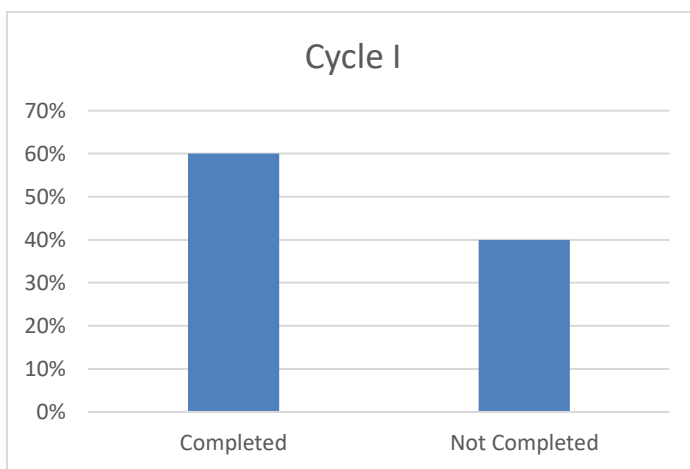
While student activities are students responding to greetings, students praying before learning begins, students doing icebreaking before learning begins, students answering apperception in the form of trigger questions, students receiving motivation from the teacher before learning begins, students listening to learning objectives conveyed by the teacher, students understanding the material, students when dividing study groups, students completing LKS, students delivering LKS, students concluding learning materials, students working on evaluation sheets, students listening to moral messages conveyed by the teacher and students praying before ending learning.

The learning outcomes obtained are based on group work and also pre-test questions given by the teacher to each student. This test is carried out by the teacher repeatedly in each cycle. Based on the results of the study, student learning outcomes in each cycle can be seen in the table below:

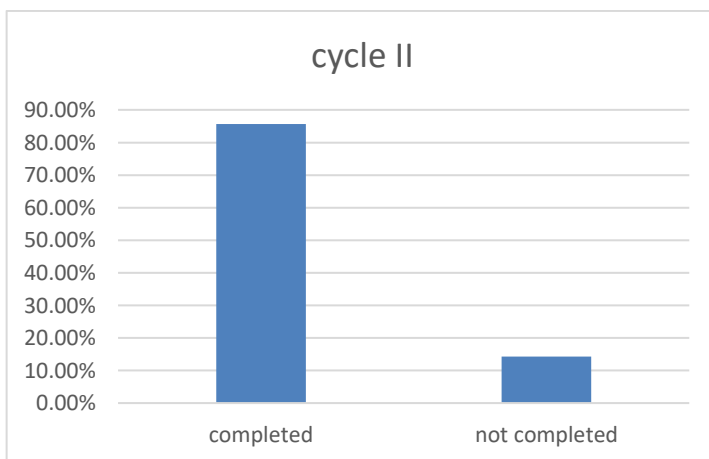
Table of Learning Outcomes of Grade IV Students

No	completeness	frequency		Persentase%	
		Cycle I	Cycle II	Cycle I	Cycle II
1	Completed	12	18	60%	85,70%
2	Not Completed	16	10	40%	14,3%
	Total	28	28	100%	100%

Based on the results of the final test conducted, the learning outcomes of grade IV students have increased. In cycle I, the learning outcomes of students only reached 60%, this has not achieved the completion of student learning classically. Students who achieved completion were 12 people and 16 people did not complete.



In cycle II, student learning outcomes increased to 85.70%. In this cycle, student learning outcomes reached the maximum limit and had achieved classical completion. The use of image media made students more active than before so that the learning outcomes obtained by students in cycle II increased to the maximum limit .



The results of the study showed an increase in students' learning outcomes in science lessons using picture media, where students were more interested, understood and were active in the learning process. This learning model relies on pictures in its learning process, these pictures are the main factor in learning (Sa'adah, 2017).

The use of picture media can help students to increase their learning motivation. This picture media can attract students' attention to listen to the explanation of the subject matter presented by the teacher. Students prefer the learning process that displays pictures rather than just listening to lectures. The use of picture media can also create a more enjoyable and active learning atmosphere.

According to Sardiman, pictures basically help motivate students and can arouse their interest in the lesson. Helping them in language skills, art activities, and creative statements in storytelling, dramatization, reading, writing, painting and drawing and helping them interpret and remember the contents of reading material from textbooks. (Siregar, 2017)

The use of picture media students can do more learning activities because they not only listen to the teacher's explanation, but also other activities such as observing, doing, acting, demonstrating, and others. (Gunadi, 2012; Sediasih, 2017). In line with that, the benefits of using this media are expected to be able to attract students' attention and make it easier for students to understand the material. Learning will provide better results if it is designed according to the way students learn, that learning activities are active activities where students can build their own knowledge, this is a process of adjusting new concepts and ideas with the framework of thinking that already exists in their minds (Sohibun, 2017).

The learning process can change students' learning outcomes in each cycle because the learning is more interesting for students so that it can foster learning motivation, besides being clearer and more meaningful, so that it can be understood by students, teaching methods will be more varied, not merely verbal communication or lectures through the telling of words by the teacher, so that students do not feel bored, bored, and teachers do not run out of energy (Yuliana, et al, 2015). Students have overall behavioral changes. This means that learning outcomes categorized by educational experts are not viewed separately but comprehensively (Riyono, & Retnoningsih, 2015).

CONCLUSION

The results of this study indicate that the use of image media in science learning in grade IV has a significant impact on teacher activity, student activity, and student learning outcomes. In cycle I, teacher activity scored 75% with a Good category. This figure increased to 92.85% in cycle II with a Very Good category. This increase reflects that teachers are increasingly skilled in using image media to convey learning materials, so that they are able to create a more interesting and effective teaching and learning process.

One of the main factors that encourages increased teacher activity is the planning and implementation of more structured learning in cycle II. Teachers are better able to utilize image media to explain abstract science

concepts to be more concrete. Presentation of material accompanied by visualization through images makes learning more interactive, so that students find it easier to understand the material presented. Optimal teacher activity also plays a role in creating a pleasant learning atmosphere and encouraging active student participation.

Student activity also shows a significant increase. In cycle I, student activity only reached a score of 60% with a Good category. However, in cycle II, student activity increased to 93.33% with a Very Good category. This improvement shows that students are increasingly involved in learning and more actively participate when image media is used. Students become more enthusiastic in observing, discussing, and answering questions based on the images presented.

Image media has been proven to be able to increase students' interest in science lessons. Interesting images that are relevant to the learning material help students to be more focused and interested. With the help of image media, students can develop critical thinking skills, analyze, and draw conclusions based on the visual information they see. In addition, image media also supports collaborative learning, where students can share understanding and work together with classmates in analyzing images.

Student learning outcomes also increased significantly from cycle I to cycle II. In cycle I, student learning outcomes only reached 60%, where only 12 students achieved completeness, while 16 other students had not completed it. These results indicate that learning in cycle I was not fully effective in helping students achieve good understanding. However, after improvements were made in cycle II, student learning outcomes increased sharply to 85.70%. In this cycle, almost all students had achieved classical learning completeness.

This improvement in learning outcomes shows that the use of image media not only attracts students' attention, but is also effective in improving their understanding of the learning material. Image media helps students to associate visual information with the concepts being taught, making it easier for them to understand and remember the learning material. This is very important in science learning, which often involves complex and abstract concepts.

The success of learning with image media in this study also shows that image media can be a solution to overcome challenges in increasing student involvement in learning. Teachers who are able to utilize image media well can create a more dynamic and interesting learning atmosphere. Students who were previously passive in learning can become more active and enthusiastic.

In addition, the results of this study also provide an illustration that the use of image media can be an effective strategy to improve the overall quality of learning. Image media not only helps students understand the material, but also trains critical thinking and speaking skills. By involving

students in discussions and image analysis, learning becomes more meaningful and in-depth.

The learning outcomes obtained are based on group work and also pre-test questions given by the teacher to each student. This test is carried out by the teacher repeatedly in each cycle. Based on the results of the study, student learning outcomes in each cycle can be seen in the table below:

Table of Learning Outcomes of Grade IV Students

No	completeness	frequency		Persentase%	
		I	II	I	II
1	Completed	12	18	60%	85,70%
2	Not Completed	16	10	40%	14,3%
	Total	28	28	100%	100%

Based on the results of the final test conducted, the learning outcomes of grade IV students have increased. In I, the learning outcomes of students only reached 60%, this has not achieved the completion of student learning classically. Students who achieved completion were 12 people and 16 people did not complete. In II, student learning outcomes increased to 85.70%. In this cycle, student learning outcomes reached the maximum limit and had achieved classical completion. The use of image media made students more active than before so that the learning outcomes obtained by students in cycle II increased to the maximum limit.

The significant increase in teacher activity, student activity, and learning outcomes from I to II shows that the use of image media can be part of sustainable learning innovation. Teachers need to continue to develop creativity in utilizing relevant learning media to create a better learning experience for students. Overall, the results of this study indicate that the use of image media in science learning in grade IV is very effective in increasing teacher activity, student activity, and student learning outcomes. With careful planning and proper implementation, image media can be a powerful tool to support learning success, both in terms of understanding the material and student involvement in the teaching and learning process.

ACKNOWLEDGEMENT

Based on the research conducted by the researcher, there are several suggestions as follows:

Teachers are expected to be able to use new models and adjust them to learning materials, such as picture media. This media is very effective to use because it can increase students' enthusiasm for learning. By using this

media, all students are involved so that all can play an active role in the learning process.

Teachers are expected to be able to use a variety of media so that they can improve children's motor skills so that they can train students' thinking skills. In addition, this media can also train visuals, improve children's cognitive skills, train children's reasoning, and make children sensitive to their environment.

The results of this study are expected to help other researchers. If researchers use picture media, researchers must explain how to use it clearly so that students can understand the material easily.

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