



## Classic Learning Media Such As Image Media: Do They Still Have An Impact On Learning In Elementary Schools?

**Rizki Ananda<sup>1</sup>, Farhan Fajar Pratama<sup>2\*</sup>**

<sup>1</sup>Faculty of Science Education, Universitas Pahlawan Tuanku Tambusai, Riau, Indonesia

<sup>2</sup>Faculty of Tarbiyah and Teacher Training, Institut Agama Islam Negeri Kerinci, Kerinci, Indonesia

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**\*Correspondence Author:**  
[farhanfajarpratma@gmail.com](mailto:farhanfajarpratma@gmail.com)

**Abstract:** This research aims to determine the impact of classical image media in improving student learning outcomes in science subjects amidst developments in time and technology. This research is classroom action research carried out at MI No. 34/E-3 Bunga Tanjung. The subjects in this research used purposive sampling, namely with the researcher's consideration that there were 20 students studying science material. The data collection technique in this research used a descriptive test sheet with a total of 5 questions, as well as a student and teacher activity questionnaire sheet as well as random student interviews (10 students), which were used as supporting data for the research results. The data analysis technique used is by assessing the average test results of students' scores with a minimum completion criteria indicator (KKM) = 70, where students will be said to be successful if their average score is the same or more than the KKM score, and also the research will be considered successful if 75% of students passed. The results of the research carried out in the first cycle showed that out of 20 students, they got an average score of 63, where only seven students were successful, or around 35%, while 13 students, or 65%, still had not succeeded in fulfilling the KKM so they were still must be continued in cycle II. The results of the research in the second cycle showed an increase where out of 20 students, they got an average score of 82, where 17 students, or 85%, succeeded in fulfilling the KKM, and only three students, or around 15%, had not yet met the KKM, so they had more than 75% of students were declared successful, and it could be concluded that the research was successful and did not need to be continued in cycle III.

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## INTRODUCTION

The modern education era has now changed teachers' views and activities, especially in the learning process. Many teachers believe that technology must now support learning to make it easier for teachers to convey lesson material (Boulian & Theocharis, 2020; Caton *et al.*, 2022). However, quite a few teachers also think that classical image media can still handle and improve learning at its maximum. The current educational process will provide the possibility of technological facilities to make learning easier (Grace *et al.*, 2014; Harrison & SLaco, 2022). Still, there is also a display for elementary school children that image media is sufficient to overcome and meet the needs of students. Whatever media

the teacher uses in the learning process, the aim is the same, namely to make it easier to provide understanding or material to students.

Technology is an important part of changing the paradigm and style of education in some schools, while in other schools, it still needs to be used optimally. Students have been encouraged to provide an understanding that must be informative, with information that is very easy to obtain using social media (Boulian & Theocharis, 2020; Friesem, 2016). Still, in some places, children need the most technological facilities, such as the Internet. Technological developments are an advantage for students and teachers in making learning smoother and better. In contrast, teachers who need a better understanding of technology must have the right concepts to carry out the learning process. Teachers should use appropriate and appropriate technology for students' conditions so that what they do has clear goals and direction (Azizah & Supriana, 2023; Starzinski & Starzinski, 2017). Technology and classical image media are systems whose development sometimes cannot be controlled, so teachers and students must know and be aware of themselves as users of or who take advantage of learning using both technology and classical image media. Whatever the teacher does, the aim is to make it easier to understand and deliver material to students (Adha *et al.*, 2023; Xu *et al.*, 2023).

Technology and classical image media have been developed as educational tools and included as learning aids in all tertiary and basic education elements. Technology and image media can become a forum that can provide broad insight and knowledge (Sulman *et al.*, 2023; Suparman *et al.*, 2020). The classical use of technology or video media aims for Indonesian education to compete with other countries, hoping to be at least included and adapt to the latest developments in knowledge. Education must always improve so that all levels can actively learn and design appropriate learning processes (Bertrand & Namukasa, 2020; Muhammad *et al.*, 2022; Mullet *et al.*, 2018). We hope that whatever teachers do, whether using technology or classical graphic media, will facilitate the dissemination of knowledge. However, the reality is that many schools and children still need to maximize or utilize technology or classical graphic media properly and appropriately (Utamai, 2020; Wora *et al.*, 2023).

The process of mastering information technology in Indonesia is increasing rapidly; many children can now use telecommunications devices such as cell phones to search for news and knowledge. The impact of information sources is what students do and how long they use the technology for the learning process. The researcher's view is that the need for more use of technology in learning in Indonesia is due to little control (B. H. Chen & Chiou, 2014; Kim *et al.*, 2021); there should be strict regulations for every student, especially in elementary schools, in using appropriate technology (James & Busher, 2013; Sullivan & Freishtat, 2013). Researchers believe technology is sometimes not used enough in learning because teachers and students need to understand and pay attention to the latest learning processes that align with current developments. Another factor in the need for teachers to use appropriate applications is the need for internet signals in rural areas, so many teachers think that classical image media can be a solution to the learning process.

Teachers have long used image media in schools, especially elementary schools because it can provide satisfactory results. The classical graphic press can provide teachers

with the ability to understand the material being taught effectively and efficiently (Hanna *et al.*, 2016; Utamai, 2020). Many developments over time have changed teaching methods, so it would be interesting to re-analyze whether classical image media created directly by teachers is still effective, especially in the cognitive realm of students. Classical image media can still make a big contribution to improving student learning outcomes. Until now, many researchers still see how many image media are used in elementary schools, even though many applications resulting from technological developments have emerged. Classical image media can provide convenience in learning. They can meet the needs of students amidst the obstacles of difficult signals and the use of technology, especially in the cognitive domain of elementary school students.

The process of implementing image media, which is still carried out, especially in times like now where technological developments are developing very rapidly, has become a study that sometimes goes unnoticed, even though teachers' consistency in using image media up to now continues well and is used consistently (Amir, 2016; Hanna *et al.*, 2016; Utami, 2018). Researchers also see that there is too much research discussing how technology is used in the world of learning, and researchers have not yet rediscovered the capabilities of classical graphic media amidst technological developments. Researchers hope that the findings obtained can provide an understanding that learning media does not have to be modern but how appropriate and effective it is for learning outcomes.

## METHOD

The aim of this research is to reveal how learning media can improve the quality and outcomes of student learning. The type of this research is classroom action research (PTK), where efforts are made to improve a learning system that is increasingly experiencing decline. According to this type of quantitative research, it is part of the research action that is used, one of which is in a class that is experiencing a very worrying problem in the learning process, so an effort is needed that is truly capable and appropriate in overcoming students' problems (Creswell, 2012; Johnston, 2014). In research that has been carried out, researchers plan by finding and placing problems according to existing problems; researchers can solve problems through the use of learning media, which is able to change learning for the better. This research was conducted because researchers found problems in parts of the learning media that were rarely used or prepared well. Learning media used at SD 032/XL Simpang 3 Rawang. The population in this study was 20 class V students. This research used a total sampling technique to determine the research sample, so the sample in this research was 20 elementary school students in class V.

Data collection techniques in this research were used: teacher learning activity questionnaires and student learning activities, test questions at the end of each cycle, documentation of the learning process and interviews with 12 students who were divided based on grade levels, namely high, medium and low. In this research, a cycle system is used, where two cycles are prepared, and if it is not successful, it will continue to cycle three and so on. This research used two meetings for each cycle consisting of 5 essay questions. This research was conducted on subjects related to natural science (IPA). The research data obtained in each cycle will be analyzed both mathematically and

descriptively and also supported by the results of interviews that have been conducted. The data analysis process was carried out through a questionnaire on student learning activities and teacher teaching activities so that it could be seen how the learning was implemented from the teacher's and student's point of view, whether the implementation went smoothly or not and quantitative analysis was also carried out.

Test data analysis will be carried out at the end of each cycle with five essay questions used. The average student score will be seen, provided that students will be considered successful if the average student is 75% complete or successful in learning where the reference is the student's KKM for science learning. is 70. The documentation analysis process is used during the learning process, and also, for the interview process, 12 people will be selected by dividing three people by the highest scores, three people with medium scores, and three people with the lowest scores. The interview results will be validated or synchronized with student test results and the implementation of learning from teachers and students. The results of this research will provide a more comprehensive picture of the capabilities of classical image media on learning outcomes amidst technological developments.

## RESULT AND DISCUSSION

This research tries to see how the image media used in science learning contributes to student learning outcomes. The image media used is classic image media, namely images in the form of picture cards that are given or introduced by the teacher in the learning process. This research provides some general information or data regarding the average student grades for each cycle, which can be seen in Table 1.

**Table 1.** Average student test results for each cycle

Cycle	The number of students	Average	Number of people who passed	Number of Failed
Cycle I	20	63	7 (35%)	13 (65%)
Cycle II	20	82	17 (85%)	3 (15%)

Research that measures how image media influences student learning outcomes amidst technological developments provides an understanding that, in fact, this media is still feasible and can be used to improve student learning outcomes in particular. The research that has been carried out in Table 1 shows data that there has been an increase in student learning outcomes from cycle I, namely with an average score of 63, increasing in cycle II, namely with an average score of 82. The increase in scores provides an understanding that classical image media is very capable. Classical image media can influence student learning outcomes, especially science material in elementary schools (S. Chen *et al.*, 2022; Y. Chen *et al.*, 2023). Image media provides a focus in the learning process, where students can have an opportunity to argue and analyze through the images provided and conduct discussions to develop a better understanding of or theory about natural science (science).

Research also shows how many students need to complete their learning. The indicator or reference criterion for student learning completeness is KKM = 70, so data

was obtained that in the first cycle of 20 students, data was obtained that seven students completed or 35%. In contrast, 13 did not complete it, or 65%. In Cycle II, there was a significant increase, with 17 students completing, or 85%, while three students did not complete, or 15%. The views of students as complete and incomplete are seen from the average student score, where research is considered successful if the average student score is 75%, whereas, in research conducted in cycle II, the average score of students who passed has reached 85%, thus achieving the target. Moreover, the research was successful in cycle II.

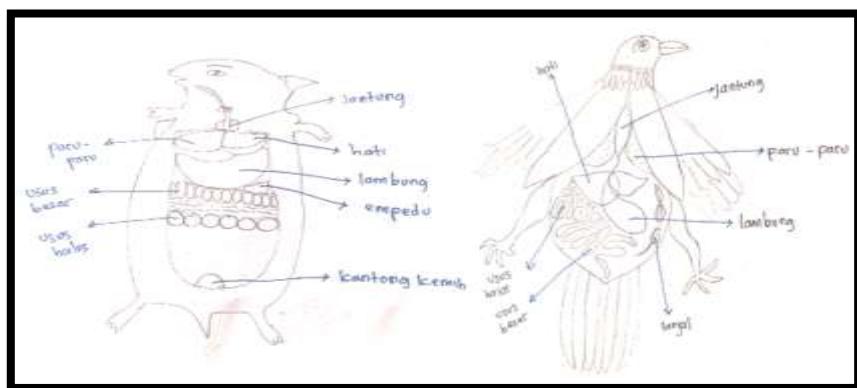
#### *Analysis of increasing student grades using image media Cycle I*

The research process was carried out using classroom action research (CAR), which is a process consisting of four stages, the focus of which is planning, implementation, observation, and reflection (Creswell, 2012). This classroom action research provides a systematic frame of reference. It is carried out sequentially in the learning process, where in this research, the science material is influenced by the classical image media provided. The sequential research process is able to provide a detailed and comprehensive picture and view of the learning process (Patall *et al.*, 2017; Prihandono *et al.*, 2023). Learning in the first cycle of the planning process was carried out by asking school teachers for consideration together with researchers to design learning modules and LKPD (Learner Worksheets) in accordance with the independent curriculum where all the tools produced were science material.

In the research, teachers used textbooks or self-made image media in carrying out the learning process. The image media he uses is very effective in increasing students' understanding in science learning and is very effective in the learning process. The effectiveness of simple pictures can be quite effective in providing encouragement and enthusiasm for students in carrying out learning (Fernández, 2005; Sanchez & Weber, 2019), especially science learning. In the second stage, namely the learning process, namely the application of science image media, the image media process gives students the ability to be more focused and directed in learning. The image media used is media that focuses on the habitat of living creatures, where all material is presented supported by a question, do animals have living creatures, can they live in the same habitat? This question will be a question that can trigger students' creativity and interest in learning to become even better (El-mashad & Hamed, 2022; Hadar & Tirosh, 2019).

The learning process will encourage students to explore their knowledge more deeply. Learning will become more meaningful if the knowledge is considered important for students to possess and also becomes an ability that can encourage students to become better and more qualified individuals. Students in learning must have confidence that the material can be carried into their lives in the future so being faithful to the material taught by the teacher is very important to complete. The researcher in this study provides a solution in science learning by using an image which the researcher believes is able to encourage students to become better individuals in understanding the material being taught. In research, teachers try to provide simple solutions by creating material that is

transformed into pictures, especially science material. As for this research, the media images provided, one of which can be seen in Figure 1.



**Figure 1.** Classic image media for Science Cycle I

In cycle one, the process of observing and observing all the activities carried out by researchers in each part of the learning process is also carried out, where each system can be looked at and observed more deeply. In cycle I there is a picture of a guinea pig which is used as a learning medium, where the teacher gives the students an explanation. organs possessed by these animals in more detail and clarity. Then students will observe and observe more carefully. The process of observing the media image material provided is able to encourage students to focus more and analyze parts of the material (De Haro, 2020; Honey *et al.*, 2014). The student's focus also depends on how the teacher gives an explanation in presenting the learning, which will then become a simple conclusion that can encourage students to be more enthusiastic in understanding the learning material better (Taqwa *et al.*, 2022; Torres, 2011). The results of interviews with students also show data that students are very enthusiastic in understanding the learning process so that classical image media is actually quite capable of providing very good learning results.

The research process in cycle I ends with a reflection stage, namely seeing how the teacher's actual learning process using image media has been carried out well or not. This reflection process will be an illustration of what the researcher will do in the future, what needs to be added or improved. The activities of students and teachers must become a unified whole and can be seen as an ability that is measured better and more maturely. The teacher's ability to manage the class will of course be very influential on students' activities as recipients of information, which in this case is knowledge of science material.

Learning activities can be the basis for a more effective and efficient learning process, so teachers must provide support and pay closer attention to each learning process carried out. Student activities must be able to be assessed and teacher activities must also be measured better. Each activity will of course have a different impact on individual students, but in the learning process there must be a minimum average activity that students and teachers must have so that the results of a learning process can run optimally and better. The quality of student and teacher activities will be a benchmark for whether the learning process is going well or not. The research data on teacher and student activities in this research, especially for cycle I, can be seen in Table 2. Where in Table 2 it will be

illustrated how the learning activities of teachers and students, especially in science subjects after the application of graphic media is carried out, are depicted in detail and can be the basis for the improvement process for the next cycle.

Table 2. Teacher and Student Activity Data in Cycle I

<b>Question</b>	<b>Student Activities</b>		<b>Question</b>	<b>Teacher Activities</b>	
	<b>Yes</b>	<b>No</b>		<b>Yes</b>	<b>No</b>
Students are enthusiastic in learning	13 People	7 People	The teacher explains the lesson enthusiastically	Yes	-
Students are motivated to learn	18 People	2 People	Teachers motivate students in learning science material	Yes	-
Students focus on the teacher's classic media images happily	12 People	8 People	The teacher presents the mdei drawing to the students	Yes	-
Students hold discussions using the teacher's graphic drawing media	16 People	4 People	The teacher encourages students to conduct discussions on science material	Yes	-
students make conclusions about classic pictures	18 People	2 People	The teacher asks students to draw conclusions	Yes	-
Student Average Score (Percentage)	77%	23%	Value (Percentage)	100%	

This research explains the activities of teachers and students in the learning process, where for student learning activities, only around 77% of students carry out activities according to the learning objectives that the teacher has designed. In comparison, 23% are still not optimal. Judging from the teacher's learning activities, all plans the teacher has prepared have run optimally, namely (100%). This learning process which has not been optimal provides room for improvement in the second cycle so that the learning process can run as expected. Analysis of deficiencies in cycle I can be a reference in forming a better and more focused learning process.

The research process in cycle I, after the learning process was carried out, continued with a test with five essay questions where the maximum score that students could get was 100. The essay test was used to measure how much mastery of the material the students had (Nuriana & Yaya, 2014; Tseng *et al.*, 2019). Essay tests can provide an overview of the actual learning outcomes and become a basis for the learning process in the future. Data on learning outcomes obtained by students can be seen in Table 3.

Table 3. Student learning outcomes in Cycle I

<b>Number of Students</b>	<b>KKM</b>	<b>Average Student Grade</b>	<b>Number of Students Who Completed</b>	<b>Number of Students Who Did Not Complete</b>
20	70	63	7	13
Percentage			(35%)	(65%)

Table 3 shows data that in cycle I, the learning process experienced quite good development, but it cannot be denied that it has not run optimally. The development of the learning process is not optimal, where the average student score of 63 is still below the KKM average. From the results of interviews with students, information was obtained that, in fact, the students had experienced learning and mastered the material quite well, but there were still obstacles in adapting to the media provided by the teacher, and also, the learning strategies used still felt new. The research results in cycle I actually indicate that apart from learning media, an appropriate learning model is still needed to convey science learning using image media. Teachers must be able to encourage students and direct students to better understand the learning process better and more appropriately (Altshuler & Bosch, 2014; Moallem *et al.*, 2019; Rusli *et al.*, 2023). Research in cycle I indicated that there were 13 students who were in the complete category or (65%), so it still had not exceeded or reached 75% as the standard for research in this cycle to be successful, so it still had to be continued with Cycle II and of course with reference or consideration of the findings and learning process in cycle I.

#### *Analysis of increasing student grades using image media Cycle II*

The learning process in cycle II is an inseparable part of the learning in cycle I. The weaknesses and strengths in the learning process in Cycle I will be the best guide in expediting the learning process in Cycle II. Learning will be an inseparable part of how improvements are made by a teacher from previous findings (Dong *et al.*, 2020; Sanchez-gomez, 2022; Shalini, 2021). The learning process in cycle II still uses four stages in classroom action research, namely planning, implementation, observation, and reflection. All stages are carried out, of course, by paying attention to reflections on previous learning. The learning process will go better if all weaknesses in Cycle I can become a reference for learning, and this is proven in Cycle II.

Learning in cycle II started from reflecting on the weaknesses that occurred, where in cycle I, it was found that the average score of students had not exceeded 75% more than the KKM, namely 70, where only an average score of 63 was obtained, and only 35% of students had completed it while 65% had not completed it. Judging from the learning activities of new students, 77% of students are active, and around 23% are inactive. 77% of active students indicated that the science learning process was not optimal using image media and still needed maximum improvement so that the learning process could run better. The results of the reflection in cycle I become a reference for researchers in planning learning in cycle II, where activities or attention to students in the learning process using image media will be given more attention so that the learning carried out will be better and maximized. Re-planning from teachers together with researchers becomes the basis for conducting better and better quality research (Bocala, 2015; Margot & Kettler, 2019). Planning will be the most important basis for whether the learning process will run better or not. Every plan must have clear benchmarks and indicators and can be used as a reference for previous learning so that weaknesses in previous learning can be overcome and not repeated. A good and mature plan is the beginning of successful, good and quality research.. This plan will be arranged in more detail based on the weaknesses that occurred

in cycle I. In cycle II, the learning process using picture media still discusses science learning, but the pictures that the teacher has made are more detailed, as in Figure 2.

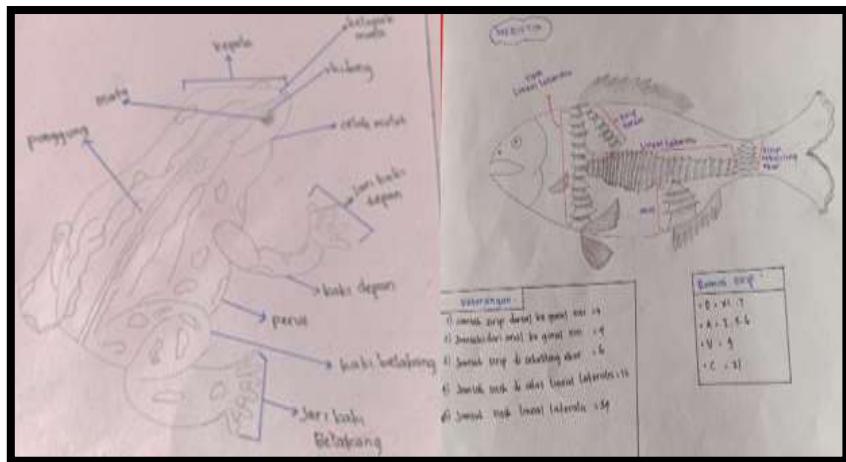


Figure 2. Classic image media for Science Cycle I

In Cycle II, learning was carried out more carefully because there was already a reference for how this image media was given in Cycle II. Learning in cycle II continues to focus on the parts of living things, whereas, for cycle II, the pictures given are similar to cycle I, which can be seen in one of the forms of pictures taught in Figure 2. The picture media learning process in this cycle provides a good impact where students are used to and understand what the teacher is saying so that all image media prepared by the teacher can be conveyed more effectively and efficiently. In implementing learning, teachers will focus on student activities that are considered less than optimal in each learning process and element. Students will gain understanding according to their ability to analyze the images that have been given (Y. Chen *et al.*, 2023; Mansir *et al.*, 2021).

The learning stages will make students more focused on the learning process, where students will jointly analyze the pictures given by the teacher so that students will exchange thoughts and understanding of the material provided. Exchanging ideas regarding understanding and learning materials will enable students to better understand the objectives of the learning being carried out, and the teacher will also provide explanations on the pictures according to the learning targets and objectives. The process of implementing learning in cycle II took place well and was appropriate for each variable used as a reference for the application of learning media because, from the results of the cycle I, the researcher knew the variables that played an important and neglected role in the learning process and could be resolved better. Learning will take place effectively if every component that plays a role in learning can be known (Abiolu & Okere, 2012; Thomas & Akdere, 2013).

Every component in learning must be known by the teacher because it can influence student learning outcomes. Students' abilities will be encouraged to be of higher quality so that students will be able to have the ability to analyze directly and more thoroughly the knowledge that is being analyzed, and in this case it is science material. Research in cycle

II provides an illustration of how learning activities can run optimally. The role of teacher and student activities in cycle II can be seen in Table 4.

Table 4. Teacher and Student Activity Data in Cycle II

<b>Question</b>	<b>Student Activities</b>		<b>Question</b>	<b>Teacher Activities</b>	
	<b>Yes</b>	<b>No</b>		<b>Yes</b>	<b>No</b>
Students are enthusiastic in learning	16 People	4 People	The teacher explains the lesson enthusiastically	Yes	-
Students are motivated to learn	19 People	1 People	Teachers motivate students in learning science material	Yes	-
Students focus on the teacher's classic media images happily	17 People	3 People	The teacher presents the mdei drawing to the students	Yes	-
Students hold discussions using the teacher's graphic drawing media	18 People	2 People	The teacher encourages students to conduct discussions on science material	Yes	-
Students make conclusions about classic pictures	18 People	2 People	The teacher asks students to draw conclusions	Yes	-
Student Average Score (Percentage)	88%	12%	Value (Percentage)	100%	

The learning activities in this research are in Table 4, wherein, in the second cycle, the teacher maintained the learning process consistently, and 100% of everything was carried out and implemented optimally. Teacher consistency in implementing learning media on science material positively impacts student learning outcomes. The teacher's activities in carrying out the learning process in a clear and precise sequence are indirectly able to encourage students' understanding to become better (Divanji *et al.*, 2023; Sigall & Pabst, 2005). A teacher activity that is 100% provides an illustration of the teacher's seriousness in carrying out the learning process so that the teacher can better organize the process of presenting the material provided, which will also increase student learning activities. Student learning activities in cycle II experienced a significant increase, whereas in cycle II, it was 88%. The increase in student activity of 88% provides information that actually student activity using classical picture learning media is quite good in increasing student activity in science material. Students are able to carry out all their learning processes well so that all the variables desired by the teacher, which they believe can be increased, can be achieved quite well, even though they are not yet optimal overall.

Increasing student and teacher learning activities in the science learning process in cycle II will certainly have a significant impact on student learning outcomes. Positive learning activities can increase students' interest or enthusiasm for learning so that they can improve student learning outcomes for the better. Teacher and student learning activities in cycle II that have good enough criteria will encourage students to understand more at a deeper or advanced level so that the picture media provided by the teacher will make them more enthusiastic in their learning (Karimzadegan & Meiboudia, 2012; Pahrudin *et al.*,

2019). Good student and teacher activities are in line with good student learning outcomes data, where students are able to be above the average graduation score with  $KKM = 70$  so that in cycle II, everything goes according to the researchers' expectations. The research that has been conducted shows that student learning outcomes scores on science material using classical image media can be seen in Table 5.

Table 5. Student learning outcomes in Cycle II

Number of Students	KKM	Average Student Grade	Number of Students Who Completed	Number of Students Who Did Not Complete
20	70	82	17	3
		Percentage	(85%)	(15%)

Research in Cycle II provides a picture as shown in Table 3, where the average student score has increased quite well, where with  $KKM = 70$ , the average student score is 82; this shows that almost all students get good grades by learning using classical image media on science material, then viewed from the completeness of student learning with indicators of success if 75% of students' average scores above the KKM have also been met, where almost 85% of students are successful so that learning for cycle II is considered successful. The success of this research, which was shown by the students' excellent average scores, led to a decision that in cycle II, the research had been declared successful and would no longer be continued in cycle III. The success of this research has provided the fact that, in fact, the best media is not sophisticated media, but good media is the right media to overcome problems in a situation, and it has been proven that classical image media is still very capable of playing a role in the learning process, especially science learning amidst technological developments and developments. The era is getting more sophisticated day by day.

Cycle II research also used an interview process to provide a reinforcement of the research results that the researcher obtained in the study, where from the results of interviews with students (10 people) who were taken at random, information was obtained that the graphic media was actually sufficient to provide an explanation to them in general about the material provided. When students become more focused and enthusiastic in analyzing each picture given, their enthusiasm will be an encouragement to become better at mastering knowledge in learning (Erdogan & Senemoglu, 2014; Roca & Gagné, 2008). Enthusiasm and interest in learning usually go hand in hand in influencing student success, so teachers must be the main priority in learning. Teachers also conducted interviews with researchers where information was obtained that actually graphic media is very easy to make, especially as it does not require significant expertise or special skills and is very cheap and simple to obtain, so it is very good, especially in rural or inland areas which require simple but still effective learning Efficient to use.

## CONCLUSION

The results of the research that had been carried out were obtained where in cycle I showed that out of 20 students obtained an average score of 63, of which only seven students were successful, or around 35%, while 13 students, or 65%, were still

unsuccessful. In fulfilling the KKM, it still has to be continued in cycle II. The results of research in cycle II showed an increase where out of 20 students obtained an average score of 82, of which 17 students, or 85%, succeeded in meeting the KKM, and only three students, or around 15%, succeeded in meeting the KKM. have not met the KKM so that more than 75% of students have been declared successful, and it can be concluded that the research was successful and does not need to be continued in cycle III. In the second cycle of this research, the data clearly shows that classical image media is still very good and able to improve student learning outcomes, especially in natural science (science) subjects, and is still able and reliable to use amidst developments in time and technology. The researcher hopes that other researchers will try to analyze other variables, especially in rural areas where technology or applications in the learning process are still rarely used amidst current developments, and also use a learning strategy that can make the learning process using image media more focused and maximal.

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