

SCIENCE LEARNING MEDIA: ANALYSIS OF UTILIZATION IN CLASS V MI AL MUBAROK

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Abstract

Learning media are tools or intermediaries used by teachers to channel information to students so that learning objectives are achieved. If we look at the facts on the ground, learning media has its own advantages and challenges in improving the quality of learning, especially at MI. Teachers are required to carry out learning using media, but on the other hand, they face many obstacles such as inadequate facilities and infrastructure. This condition makes teachers have to rack their brains with their abilities and creativity together with students to create alternative media so that the use of media is appropriate and not a barrier to learning. This research aims to analyze the use of learning media and the problems of using science learning media in class V as well as efforts to overcome these problems. This research was conducted at MI Al Mubarak Semanding. This research uses a qualitative approach with a case study type of research. Namely focused on learning media analysis. Data collection techniques include observation, interviews and documentation. The results of this research show that teachers are able to face the challenges of technological limitations by creating alternative media with students. However, schools are also trying to fulfill the provision of technology-based media by running a one day one coin program so that learning is more effective and efficient.

Keywords: Science, Learning, Media, Utilization

Introduction

Learning media is one of the factors that plays an important role in the learning process. Teachers use media as a tool or intermediary in conveying material so that students can understand it well (Wahyuningtyas & Suteng

Sulasmono, 2020). Learning Media can be defined as physical or non-physical tools that are deliberately used as intermediaries between teaching staff and students in understanding learning material to make it more effective and efficient. So that it attracts students' interest in learning further (Daniyati dkk., 2023). Learning media is a means of conveying learning messages in relation to the direct learning model, namely through the teacher acting as a provider of information and in this case the teacher must use various appropriate media. Learning media is a means for the teaching and learning process (Noviana Ramadani dkk., 2023). In science learning, learning media is a tool that is really needed by science teachers to help students understand a concept when learning science, especially media that can be operated by students themselves. As a tool, the effectiveness of using the media itself is very dependent on the teacher's ability to use and facilitate the media itself. Learning media is used to replace most of the teacher's role as a provider of information or provider of learning material (kemdikbud). In Natural Sciences (Science) subjects, the use of learning media is very important because this subject requires students to understand concepts which are often abstract and require visualization. With the right learning media, teachers can convey science material in a more concrete and interesting way, so that students can more easily understand and apply these concepts in everyday life. In the teaching and learning process the presence of media has quite an important meaning. Because in this activity the ambiguity of the material presented can be helped by presenting the media as an intermediary. There are at least two functions of media in learning, namely: 1.) Media as a tool. Media as a tool in the learning process is a reality that cannot be denied. Because this media is here to help the teacher's task in conveying learning material/information that will be given to students. As a tool, media has a role in facilitating the path to achieving learning goals. 2.) Media as a learning resource Learning resources are anything that can be used as a place where teaching materials are obtained or as a source for someone's learning. Media as a learning resource is recognized as an auditive, visual and audiovisual aid. Technology is agreed as a medium, not only as a tool, but also as a learning resource in the learning process. (Nurhasana, 2021).

Utilization of Information Technology as a learning medium can be through the use of the internet in e-learning or the use of computers as interactive media.

The use of computers in learning allows the learning process to take place individually (individual learning) by fostering independence in the learning process, so that students will experience a much more meaningful process compared to conventional learning (Sawitri dkk., 2019). The latest learning media is now more varied and more modern with sophisticated technology. The newest media also has many advantages that can improve the quality of learning. Some of these advantages include being more interesting and interactive. The latest learning media is more interesting than traditional learning media. This is because the latest learning media uses technology that attracts user attention and allows users to interact with learning content. Even though the latest learning media has many advantages, using the latest learning media also has challenges, including technological limitations. Not all educational institutions have adequate facilities and infrastructure.

Through this research, it is hoped that a clear picture can be obtained regarding the types of learning media used, the level of student involvement in the learning process, and the impact of using this media on understanding science concepts. And the problems faced in using media and the breakthroughs made by teachers to overcome existing obstacles. It is hoped that the results of this research can be a reference for teachers in selecting and developing more effective learning media and making a positive contribution to improving the quality of education at MI Al Mubarak in particular, and in other elementary schools in general.

This research uses a qualitative approach. Qualitative approach Qualitative approach is an approach that in research proposals, processes, hypotheses, going into the field, data analysis and data conclusions until writing uses aspects of trends, non-numerical calculations, descriptive situations, in-depth interviews, content analysis, snowballing and stories (S. Musianto, 2002). This research uses a case study type of research. This research was conducted in class V MI Al Mubarak, Mining Village, Semanding District, Tuban Regency. The sources and types of data that will be used in this research are words, actions and documentation. Data collection techniques used include observation, interviews and document study. Observations will be carried out directly in the classroom during the learning

process. Document studies involve collecting data from various related documents, such as lesson plans, teaching materials, and student data. Data from various sources is collected and analyzed to understand the use of learning media in the context of science learning. Primary data will be obtained through direct observation in class during the science learning process. And through interviews conducted with teachers who teach science in class V to gain a deeper understanding of the learning media used. Secondary data will be obtained through document study, namely data taken from school records, curriculum and learning materials that have been used (Fitriya dkk., 2023).

Results And Discussion

This research was conducted at MI Al Mubarak to evaluate the use of learning media in Natural Sciences (IPA) learning in class V. The research used observation, interviews and documentation methods. The learning process in class V, led by Mr. Abdul Mujib, S. Pd., is considered to be running well and smoothly. Before teaching, the teacher makes sufficient preparations such as preparing a learning implementation plan (RPP), choosing the right learning method, and preparing learning media. Learning media plays an important role in conveying lesson material effectively. Class V teachers at MI Al Mubarak are active and quite frequent in using various types of learning media, including blackboards, concrete objects, the surrounding environment such as rice fields and gardens, pictures, printed books, posters, homemade alternative media, etc. Utilizing this learning media helps teachers convey material more clearly and interestingly. Collaboration between teachers and students in creating learning media makes the learning process more interactive, so that students more easily understand and apply science concepts in everyday life. When the desired learning media was not yet available at school, teachers at MI Al Mubarak took the initiative to create appropriate learning media themselves. Teacher creativity in providing learning media is one of the supporting factors for successful learning in class V. The use of media in the science learning process is expected to improve the quality of learning and have a positive impact on students' understanding and learning outcomes. The use of learning media in science learning in class V MI Al Mubarak makes a

significant contribution to the learning process. Support from many parties such as schools, parents and teacher creativity in providing media.

Class V teacher Mr. Abdul Mujib, S.Pd emphasized that the aim of using media in science learning is so that students can achieve learning goals and be successful in understanding science concepts. In implementing the use of media in science learning, Mr. Abdul Mujib S.Pd, started with apperception by asking students about the material they had studied previously. Then, the teacher links it to the material to be taught, then introduces the learning media that will be used. Students are invited to actively participate in learning by providing answers and doing direct practice with the existing media. Evaluation is carried out through questions, written practice questions, or observation reports related to student practice. The results of observations that have been made show that the use of learning media runs smoothly, is conducive, and students actively participate in learning activities. Overall, the use of learning media in science learning in class V MI Al Mubarak has had a positive impact in improving the quality of learning. The teacher has prepared and implemented learning media well in accordance with established procedures.

In implementing science learning media in class V, there are obstacles that must be overcome. Starting from the limitations of technology-based media that can be used, such as LCD projectors, there is only one in institutions and they are used interchangeably, one of the causes is the lack of funding to procure media that require large costs such as computers, torsos, microscopes and additional LCD projectors. It cannot be denied that in this increasingly sophisticated era and the faster dissemination of information, students must gain more knowledge regarding technology, especially those related to science learning, so that they can keep up with the times.

From the data obtained, MI Al Mubarak uses a lot of conventional media in science learning. Conventional media is the initial media that appeared before the internet or is called new media. Conventional media is a mass communication media that is used to send and deliver messages to the wider community (audience), for a wide area and a relatively short time (Hasan dkk., 2023). The conventional media used also includes the existing learning environment. This

environment acts as a medium that functions as teaching material. Using the environment as a learning tool involves exploiting all the elements around students as tools for learning. The environment was chosen as a learning medium because it provides optimal potential in supporting learning processes and outcomes. When students interact directly with the environment, they can observe the actual situation, which in turn makes learning more interesting and avoids boredom. The main aim of this approach is to create a special attraction for students by stimulating their curiosity, so that they become more active in participating in the learning process. Furthermore, print media, such as books, magazines, journals and papers, remain an important means of education. This media contains supporting text and illustrations that help convey learning messages. All of these forms of media have a unique role in supporting an effective learning process. In an effort to improve the quality of education, the use of various learning media is a necessity (Yuniarti dkk., 2023). This is in accordance with opinion (Herlina, 2023), which states that in the end, with learning media created by students themselves, when children learn in pleasant conditions, all physical and mental activities will be easier and faster in responding to lessons, this of course has an impact on achieving learning goals more easily so that teaching and learning activities are It is hoped by all parties that teaching and learning activities will be fun, not boring for students, and will not only take place in one direction, namely from teacher to student, but will take place in interactive and constructive learning, between students and teachers and between students and other students. achieved well, meaning it can attract students' attention to the material being presented. Using homemade alternative learning media can make the atmosphere more fun and interesting because students become actors, thereby increasing student motivation and learning outcomes.

Based on the results of observations and interviews with Vania Vivia Anindita Syahla, one of the class V students at MI Al Mubarak, the use of this media has increased students' understanding of learning material and encouraged students' activeness and interest in learning. Vania also revealed that the use of natural media such as the surrounding environment increases her enthusiasm for learning, because she gets a new learning atmosphere that is different from in class.

Teachers have also carried out stages in the use of learning media including preparation, implementation and follow-up. The teacher prepares the media before learning begins and creates a conducive environment in the classroom. Next, the teacher begins to introduce the media and demonstrate it to students. At the end, the teacher does not forget to invite students to draw conclusions and evaluate the learning process and then determine follow-up actions. This also proves that the teaching and learning process will run effectively and efficiently if supported by the availability of supporting media. Providing dynamic, conducive and dialogical educational media and methodology is very necessary for optimal development of students' potential. This is because the potential of students will be more stimulated if they are assisted by a number of media or facilities and infrastructure that support the interaction process that is being carried out (Arsyad, 2011).

MI Al Mubarak has limited technology-based science learning media such as LCD projectors, microscopes and computers. Even though this technology is very helpful in the effectiveness of learning. The use of the internet can be used as a system to create a more effective and efficient learning situation, so that teachers can further optimize face-to-face learning hours in class towards more useful things, not just limited to presenting material which should be written in written form. simple and shared via website, blog or e-mail to students (Tekege, 2017). In his journal (Ni'matul Lailiyah & Mardliyah, 2021), also stated that the obstacle in using IT-based learning media lies in its procurement. Information and communication technology is very influential in the 21st century learning process. The emergence of the independent learning curriculum is a sign that loyal teachers are expected to be able to be creative in making digital-based modules and teaching materials. Limited information technology prevents teachers from being creative in making modules and teaching materials because the basic use of platforms is digital. Schools should provide facilities that support learning activities. Facilities that can be used include computers, wifi, cellphones, projectors and so on. In implementing learning activities, there are also problems if the school lacks facilities that support the use of digital-based learning media (Rahma dkk., 2023).

In fact, there are many examples of the latest technology-based media that can be used for the effectiveness and efficiency of the learning process, including

- 1.) Adobe Flash media. Adobe Flash is an application program that is capable of creating interesting interactive multimedia by displaying animations, images, films, presentations, games, quizzes and electronic cards (Oktafiani dkk., 2020).
- 2.) Flipbook Media. Flipbook learning media is a tool or facility that has a function as an intermediary to make it easier for educators to convey lesson material other than printed books to students and make it easier and motivate students to read books anywhere and anytime (Nurwidiyanti & Sari, 2022).
- 3.) Web Media. Web-based learning media is part of the use of sophisticated technology in the world of education which is implemented in teaching and learning activities by utilizing website media that can be used via the internet network (Salsabila & Aslam, 2022).
- 4.) Canva Media, Canva is one of the many applications that can be used to design learning media. The available features can be developed as creatively as possible and make learning activities in the classroom more communicative and visual, easier and more enjoyable (Wulandari & Mudinillah, 2022).
- 5.) Interactive multimedia media, interactive multimedia in science lesson content was developed using the DDD-E development model which consists of 4 stages (Oka Juniari & Putra, 2021).
- 6.) Flash card media, flashcards are print or non-print media. Printed means flashcards that are made using hands or printing equipment (printers and screen printing), so they can be held and seen. Examples are flashcards made by yourself (by hand) using cardboard or flashcards made using tools such as computers and printing equipment. Non-print means flashcards that are produced from writing or that can only be displayed via a gadget (laptop, computer, tablet, smartphone or LCD) (Arsyaf dkk., 2022).
- 7.) Android-based media, Android is a complete, open and free platform. Complete means designers can take a comprehensive approach when they are developing the Android platform. The operating system is secure and provides many tools for building software and allows opportunities for application development (Prasetyo, 2017).
- 8.) Power point media, Powerpoint-based learning media is learning media that contains elements of text, sound, images and video (irfan dkk., 2019).
- 9.) Media Filmora, Wondershare Filmora software is a program designed to edit videos easily and simply and has very powerful quality (Ramadhayanti & Mustamiroh, 2021).
- 10.) ICT-based media, Information Communication and Technology (ICT)-based

learning media that can be developed can be in the form of animation, smart phone, internet or intranet, and CD Room/ Flash disk where the main components used include the Learning Management System (LMS) and Learning Content (LC) (Azizah Muhtar dkk., 2020).

The results of the research above show that although the media used mostly still uses conventional media such as concrete objects and simple assembled media, the learning results are also quite satisfactory and do not reduce the benefits of using the media itself, namely as an aid in learning. However, this will be more effective and efficient if supported by technology-based media. Therefore, even though teachers at MI Al Mubarak have been able to create their own alternative learning media, they will still strive to provide learning media for all school members working together and working together to complement the availability of learning media and existing facilities and infrastructure by running a one day one program. coins every day. This program has been running for about five years and continues to run until now. Apart from helping to fulfill the existing learning media, this program can also train students' social spirit and generosity.

Conclusion

From the results of the discussion, it can be concluded that the use of media in science learning is more effective and efficient if you use digital or technology-based media. However, due to the lack of existing technology-based learning media, teachers and students can be more creative and innovative in creating their own alternative media. The use of homemade alternative media can also increase students' understanding, interest in learning and activeness. The MI Al Mubarak institution not only relies on and is satisfied with self-made alternative media, but also tries to provide technology-based learning media by holding a one day one coin program..

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