Literature Study: Utilization of Audio-Visual Media in Science Subject Materials for Middle School Students

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Abstract
This study was conducted to find out about the literature study of the use of audio-visual media in the science subject matter of junior high school students. The strategy used uses the systematic literature review (SLR) method. This research is based on the advantages of knowing the advantages, shortcomings and influence of audio-visual media as a learning medium. The collection of various journals and books on audio-visual media as a reference was obtained through the website publish and perish found 23 journals published in the last 10 years from 2022. The results of this study are audio-visual media influential to improve student learning outcomes from several studies.

INTRODUCTION
Education refers to: a) spiritual values, b) personal values of discipline and respect, c) ethical and moral values, d) values of social care, e) values of the need for values. Tolerance and friendship that love peace must be supported and impregnated by the younger generation (Ridwan 2020). Education is an activity that involves many people, including students, educators, managers, the community, and parents of students (Ulliyana, 2019). Education is a process of interaction between teachers and students that helps students develop their potential (Mutia et al, 2018).

Learning is a process of interaction between students and teachers using learning resources in a learning environment. Learning aims to help students gain various experiences, and based on this experience, student behavior, including knowledge, skills, values, or norms that act as controllers of student attitudes and behavior, is achieved both in quality and quantity (Fakhirrazi, 2018). The success of the learning process in teaching and learning
activities is influenced by several factors, including teachers, students, curriculum, learning environment, and learning resources (Mutia, et al. 2017).

Science learning contains theories that can be used to solve problems in everyday life. Therefore it is emphasized that science learning in junior high schools provides direct experience to develop students' scientific skills and attitudes (Rahayu et al, 2013).

Media is the delivery of messages from the sender to the recipient of the message. More specifically, media thinking in the teaching and learning process is generally characterized as a realistic visual or electronic device for collecting, manipulating, and coordinating visual and linguistic data (Rusby et al., 2017). Asyhar (2011) divides the types of learning media into four parts, namely (1) visual media, (2) audio media, (3) audio-visual media, (4) and multimedia.

Learning media as a process of delivering learning messages between the giver and the recipient of the message. One of the learning media that is currently being developed is audio-visual media (Purwono et al, 2014). Audio-visual media is media that conveys messages or information by displaying picture and sound elements together. General media is divided into two types, namely (1). Pure Audio Visual Media, namely media that can display sound components and moving images, originating from one source. (2). Audio Visual media is impure, namely media whose image and sound components come from various sources (Siboro & Purba, 2022).

RESEARCH METHOD

This study used the systematic literature review (SLR) method. It is a research methodology, research or development carried out to combine or analyze research on a particular topic (E Triandini, 2019). A systematic literature review (SLR) has several objectives. To analyze, identify, review, or rate surveys on a particular topic when asked survey questions related to that topic. The results of several previous research edits are used to draw the following conclusions: (1) The feasibility of audiovisual learning media. (2) Responses to audiovisual-based learning media. (3) learning outcomes after using audiovisual learning media.

RESULTS AND DISCUSSION

Media is part of the components of the learning system. With the advancement of information technology, teachers provide learning materials that must be more advanced. Applying learning media must be able to be carried out by the teacher in a fun, interesting and in accordance with learning needs so that students can easily understand and accept the learning that the teacher provides (Titin, 2022).

In reviewing the literature on the use of audio-visual media learning, it can be said that it is feasible. The feasibility of using audio-visual media in Natural Sciences subjects, taking into account the competency standards in these subjects, which are contained in the 2013 curriculum.

According to Tafonao (2018), the role of learning media as a supporting medium in learning activities includes: (1) The learning process is more attractive to students and can motivate them to learn. (2) Clear material in class will be more meaningful, easier for students to learn, and better for students to achieve their learning goals. (3) Different learning methods, not only through verbal communication, but also through the teacher's spoken
language, will not make students bored and teachers will not run out of energy and thoughts. (4) Students carry out many learning activities not only to listen to the teacher's explanation, but also to listen to other activities such as observation, implementation, and demonstration. According to research conducted by Purwono (2014), student learning outcomes experienced growth and assimilation developed after using audiovisual media in the Pacitan State Middle School Science subject. The results of this study are in line with the results of Al Fasyi's research (2015) which shows that the use of video media affects students' science learning outcomes. This can be seen from the difference in normal values after testing students' science learning outcomes in the experimental class 80.36. This is greater than the control class with an average of 76.18. The results of the survey by Ege & Simorangkir (2012) show that follow-up information on facts from student test scores, learning outcomes of learning systems using general media, and student learning outcomes on the human circulation system material at SMP Negeri 2 Kelam Permai, this shows a large influence. Furthermore, from the survey results of Syamsu & Susanti (2019) and the results of the data analysis carried out, the use of audiovisual media in the control class and experimental class.

Advantages of Audio-Visual Media

Atoel (2011) states that audiovisual media has several advantages or uses, including:
1) Clarify the words of the message so that it is not too verbal (words, written, or spoken).
2) Overcome the following spatial, temporal, and sensory constraints. Objects that are too large can be replaced with realities, pictures, frame films, movies, or models.
3) Audiovisual media can play a role in tutoring.

Lack of Audio-Visual Media

According to Purwono (2014), the obstacles that can occur when using audiovisual media in learning are more on technical issues or obstacles such as: Cable sockets may not close, power supply. to a current that exceeds its own current capacity.

In addition to technical problems, the limited allocation of funds is a classic obstacle in the use of audiovisual media. The allocation of funds helps to maintain and rejuvenate the infrastructure related to the use of audiovisual media. Another obstacle or obstacle is the problem of lighting that is too bright which affects the appearance of the audiovisual material.

REFERENCES


