

STUDENT CREATIVITY IN USING AUDIO-VISUAL-BASED LEARNING MEDIA

Kasman¹, Kholidah Nur², Martina Ayu Wulandari³

¹²³Sekolah Tinggi Agama Islam Negeri Mandailing Natal; Indonesia

Correspondence email; martina.ayu93@gmail.com

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Abstract

This study examined student creativity in using audio-visual media in material presentation in class. This research used a descriptive qualitative approach. It is a case study research conducted on first-semester students of the PIAUD study program at STAIN Mandailing Natal. In this study, the research data was students' usage of learning media obtained from students and lecturers. Data collection techniques involved observation, interviews, and documentation, while data analysis consisted of data reduction, data presentation, and conclusion drawing. The results showed that the students' use of learning media increased their creativity, with the lecturers only providing themes, input, and directions. The students designed and compiled learning videos for the lecture processed their creativity, generated new ideas, and created innovation to make the learning more interesting and to add insight into science and technology. In addition, students' use of learning media increased their creativity and generated ideas on what materials to use for their videos; as a result, the media could be put to good use, and the lectures could run more effectively and efficiently.

Keywords

Audio Visual, Learning Media, Student Creativity at STAIN Mandailing Natal



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INTRODUCTION

One of the tools in the learning process is learning media. Many types and varieties of media can be used, ranging from simple to electronic forms. These tools can be in the form of books, radio, tapes, films, slides, and so on. Media is all the equipment that contains learning materials. The purpose of learning media is none other than to facilitate and streamline the learning process.

The basic concept that needs to be considered in the use of media in every educational activity is that the media must be used for and directed toward the facilitation of students' material comprehension. Thus, media use must consider students' needs (Dimaria, Peter C n.d.). In using learning media for learning, several principles must be considered: (a). The media used by the teacher must be precise and directed to achieve learning goals, not as an entertainment tool or solely to simplify material presentation. Indeed, it should help students learn to achieve their goals. (b). The media must be by the learning material. Each learning material has its uniqueness and complexity. The media used must be adjusted to the complexity of the learning material. For example, to teach students to understand population growth in Indonesia, teachers need to prepare graphs that reflect this growth. (c). Learning media must be by students' interests, needs, and circumstances. Students who have poor listening skills will have difficulty understanding lessons when audio media is used, and vice versa. Each student has different abilities and styles, which teachers need to pay attention to. (d). The media used must be effective and efficient. Media that requires expensive equipment is not necessarily effective in achieving learning objectives. Every media designed by the teacher needs to pay attention to the effectiveness of its use. (e). The media used must be by the teacher's ability to operate it. Often complex media, especially advanced media such as computers and electronic media, require special skills to operate. No matter how sophisticated the media is, it will not facilitate learning without special skills to operate it (Wina Sanjaya 2013).

Sigit Prasetyo highlighted several benefits of using media in learning: 1) The delivery of material can be uniform; 2) The learning process becomes clearer and more interesting; 3) The learning process becomes more interactive; 4) It saves time and effort; 5) It improves the quality of learning outcomes; 6) It allows learning anywhere and anytime; 7) It develops students' positive attitudes towards learning materials and processes; 8) It shifts the teacher's role more positively and productively. Thus, the media is very useful in the learning process (Sigit Prasetyo 2007).

According to Sigit Prasetyo, Edgar Daley argued that the media has various purposes. It helps in avoiding being too wordy in material presentation, overcoming limitations in terms of space, time, energy, and sensory abilities, fostering a motivation to learn, facilitating direct engagement between students and educational resources, and enabling children to learn independently based on their visual, aptitude and auditory and kinesthetic skills. In addition, the media provides uniform stimulation, equates experiences, and creates identical perceptions (Asikin 2018).

Learning conducted at STAIN Mandailing Natal, especially in the first semester of the PIAUD (Early Childhood Education) study program, is generally still dominated by the use of lectures or discussions. Only a few lecturers have used several learning media in their courses; only two or three out of 10 lecturers have used learning media such as audio-visual media. Many factors lead to the lack of use of learning media in lectures at STAIN Mandailing Natal. Among them is the need for sufficient time to efficiently use media in learning. One-hundred minutes is considered insufficient when the lecturers and the students have to prepare projectors and other tools before the lectures, so the lecturers prefer the use of lecture and discussion methods. Also, many students live far away from their villages, making it difficult to have access to the internet needed to operate the necessary technology.

The media used in learning at STAIN Mandailing Natal, especially in the 1st semester of the PIAUD Study Program, such as short films or short stories related to learning material, are usually prepared by the lecturers. The goal is to make the lectures more interesting for students so students do not get bored with the tedious learning system. However, in this case, it can be said that the students are not creative since the media are not the work of the students. It is the lecturers who prepare the media in the form of films, short stories, and so on, whereas there is a lot of potential that needs to be explored and honed by the students.

The use of audio-visual media in the form of videos prepared by lecturers can indeed attract students' interest in learning more effectively than lecture or discussion methods. Unfortunately, the chance to nurture these students' creativity is missed, whereas, in fact, in their future field of work, the students might be required to better understand and master various learning methods, learning media, as well as learning strategies. The students, especially PIAUD students, will later become teachers and educators who must be fostered and directed to have competence in their field and be professional in their work so they can be recognized for their abilities as a future teaching

workforce.

In several previous studies, a lot of focus has been on the use of audio-visual media by teachers or lecturers. Sinaga, for instance, concluded that the use of various digital media, such as online platforms or applications for education, is a must because it has a direct impact on the different learning styles. Besides, the creation and use of learning media must also pay attention to variations in learning (Yunisca Nurmalisa, 2023).

Another study concluded that professional staff and lecturers must be able to use and utilize media to support the learning process. Through the use of learning media, the presentation of material becomes easier. Among the various types of learning media that can be used is a blog. Apart from being free and unlimited in space and time, blogs are a highly efficient communication medium through which lecturers and students can interact with questions and answers, discussions, and so on. In addition, blog-based learning media is also more flexible; lecture material can be presented more attractively using videos, images, or PPTs. Blog-based learning media is beneficial not only for students but also for the lecturers themselves. A blog is also proof of professionalism. Through blogs, lecturers can also indirectly improve their creativity, hone their abilities in literacy, and develop their insight (Rika Ariyani, 2022).

Agnes Herlina Dwi Hadiyanti also found that students displayed positive perceptions of the use of multimedia-based learning media in Biology lectures. This can be seen from their feelings, attention, and understanding in learning, which tends to be high. Therefore, other teachers are advised to start recognizing and choosing multimedia as a learning medium in class so that learning can run effectively and efficiently (Hadiyanti 2015).

Other studies have shown that lecturers can carry out online lectures through Zoom and Google Meet. Maximizing the use of Zoom and Google Meet can help lecturers carry out lectures better. Zoom and Google Meet are synchronous, non-face-to-face learning media through which lecturers can ensure that students receive the material well (Tri Aristi Saputri 2021).

Furthermore, Mulyono (2021), in his research entitled *Application of Hybrid Learning Media in Reading II for Indonesian Language Education Students at IKIP Budi Utomo Malang* concluded that hybrid learning media can be used as an alternative learning media in supporting teaching and learning process in class, especially in Reading II. To increase students' abilities and understanding in Reading II, the application of hybrid learning media in the learning process requires a better understanding of lecturers, both in terms of preparation, time allocation, implementation, and

evaluation. For researchers, it is further suggested to pay attention to the development of effective, innovative, and interesting learning media that can further improve students' abilities even better in Reading II.

Based on the previous studies, it can be said that many lecturers have used learning media, especially in the lecture process. There have also been many lecturers who have introduced various learning media to their students. In general, lecturers use learning media to boost students' interest and understanding. Therefore, in this study, the authors were interested in examining how the students themselves develop or use learning media properly. The researchers were interested in examining the students' creativity in using audio-visual media to present the learning materials in class, their objectives for using audio-visual media, as well as their benefits.

METHOD

This research used a descriptive qualitative approach to describe the social phenomena that occurred in the classroom. This research was case study research in which the research was directed to collect data, obtain meaning, and gain understanding from the case. In this study, the researchers used secondary data as initial data, followed by primary data in the form of field data.

In this study, the researchers obtained the main data directly from the field or class in the form of interviews with students and lecturers. This research was carried out in the first-semester 1A PIAUD students of 2022/2023 at STAIN Mandailing Natal. In this study, researchers directly observed students' creativity in using audio-visual media in the classroom, using relevant theories to analyze according to findings in the field.

In this study, 16 students of the PIAUD IA class were divided into four groups. Each group was given the task of making a video based on the theme assigned by the lecturer. The students were later asked to display their videos in front of the other groups, who gave their responses. The lecturer also provided an assessment to both the presenting group and the other groups. Here, the learning outcomes were evaluated.

In this study, the researcher acted as the key instrument, delving into the realm of research. The researchers, in this case, carried out interviews, observations, and documentation.

Table 1. Identification of Research Focus, Data Sources, and Instruments

No.	Research focus	Data Collection Techniques and Sources	Interview Themes/Events/Document Contents
1.	The students' use of audio-visual media in delivering material in class.	Interview: 1. Lecturer	a. Definition of audio-visual media b. The use of audio-visual media in the learning process c. The steps for using audio-visual media in the learning process
		2. Student	a. Definition of audio-visual media b. The use of audio-visual media in the learning process c. The steps for using audio-visual media in the learning process
		Observation	a. Interaction among students b. Interaction between lecturers and students
2.	The student's goal is to use audio-visual media in delivering material in class	Interview: 1. Lecturer	a. Purpose of using audio-visual media b. Constraints in the use of audio-visual media
		2. Student	a. Purpose of using audio-visual media b. Constraints in the use of audio-visual media
		Observation	a. Interaction among students b. Interaction between lecturers and students
3.	The benefits of students' using audio-visual media in delivering material in class.	Interview: 1. Lecturer	The benefits of using audio-visual media in delivering material in class.
		2. Student	The benefits of using audio-visual media in delivering material in class.
		Observation	a. Interaction among students b. Interaction between lecturers and students c. The exchange between the two.

After all the data were collected, the next step taken by the researcher was to analyze the data. In this study, researchers used three kinds of data analysis, namely: data reduction, data exposure, and conclusions. In data reduction, the author reduced each lecture activity in the first semester of the PIAUD Study Program at STAIN Madina. In data presentation, the researchers presented the data on students' creativity in using audio-visual learning media in the form of tables or charts. Afterward, in the conclusion stage, the author conducted a critical analysis of the data on

the student's creativity in using audio-visual learning media from the perspective of learning media theory/discourse. Finally, the author also compared the findings with several other relevant findings to produce a dialectical discourse.

FINDINGS AND DISCUSSION

Findings

The students' use of audio-visual media in delivering material in class

In this study, the authors examine the use of instructional media at the tertiary level, with the students as the object. The researcher observed the process involved before and after the audio-visual media was used. Researchers explored in detail the process from the beginning of the lecture to the student's presentation of their papers.

Based on the results of this research, the researcher summarized in detail the steps undertaken from the start of the learning process, material presentation, until the lecture is finished. The following are the steps for using audio-visual media in lectures.

Table 2. Steps for Using Audio-visual Media in Lectures

No.	Step	Description
1.	Group Division	At the first meeting, the lecturer divides the class into several groups, with each group consisting of 2 or 3 people.
2.	Themes/Materials Distribution	After the groups were distributed, the lecturer distributed material and themes for each group.
3.	Video Creation	Students made videos in groups at home.
4.	Videos Sharing	After the videos were made, the students shared them via WhatsApp or YouTube.
5.	Presentation and Discussion	<ul style="list-style-type: none"> - In class, students presented the materials as usual by showing the videos they had prepared. - After the presentation, the presenting group invited the audience to ask questions about the materials and the videos. - The presenting group and audience had a discussion. - When the discussion was finished, the lecturer concluded.

During the learning process, good cooperation was seen in each group, and other groups were so enthusiastic about seeing the work of their friends. The resulting work reflected the seriousness and joy that radiated from the students. The use of learning media created by the students themselves went well. Lecturers only provided themes, input, and directions while students themselves designed and compiled the videos for use in the learning process. The audio-

visual media, which was created and designed by the students themselves, were then used to present their assignments in front of the lecturers and other friends. The use of audio-visual learning media was highly interesting from the perspective of both students and lecturers. The learning process also looked so effective for both the students who delivered the materials and those who paid attention to it.

On this occasion, the researcher also captured the moment as the lecture took place and the results of the audio-visual media created by first-semester PIAUD students of STAIN Mandailing Natal. Here are some pictures obtained by the researchers in the field.

Figure 1. Material and Sub-Theme Distribution



Figure 2. Group Division



Figure 3. Presentation and discussion



Figure 4. Video Results that have been Uploaded on YouTube



Figure 5. Video Results that have been Uploaded on YouTube



Figure 6. Video Results that have been Uploaded on YouTube



From several videos made by each group, the lecturer chooses the best videos to be uploaded to YouTube, with the aim that these videos can be enjoyed by others and be useful for others.

Purpose of Using Audio-Visual Media

There is surely a purpose in every use of audio-visual learning media. This purpose is expected to be realized well in lectures. If the objective of using audio-visual learning media has been reached, it means that the audio-visual media has been used successfully and optimally.

Based on the results of observations, interviews, and documentation conducted by researchers in the first semester of the PIAUD Study Program at STAIN Mandailing Natal, the purpose of using audio-visual learning media is as follows:

Table 3. Purpose of Using Audio-Visual Learning Media

No.	Objective	Description
1.	To increase student creativity	Through learning using audio-visual media, it is hoped that students can bring up new ideas about what they should design or plan for their discussion in class to encourage them to continue to innovate in a better and more interesting learning process.
2.	To improve knowledge of science and technology	The use of audio-visual media is also expected to increase their knowledge, especially in the field of science and technology, because they are required to understand various ways of making videos and dig up more information regarding the methods and the process of video making.
3.	To establish social relationships	Through the use of audio-visual learning media, students are expected to be able to establish good relationships among fellow students, work together in completing assignments and making videos, as well as share knowledge.
4.	To develop more effective and efficient lectures	Through audio-visual media, lectures are expected to run more effectively and efficiently; students are more enthusiastic and not easily bored.

The achievement of the purpose of using audio-visual learning media means that the use of audio-visual learning media is successful. In this case, audio-visual media highly needs to be used to support the success of learning.

Benefits of Using Audio-Visual Media

After identifying the purpose of using audio-visual learning media, the researchers explored the benefits of using audio-visual learning media since they will determine the necessity of the future use of audio-visual media in learning.

Based on the results of observations, interviews, and documentation conducted by researchers in the PIAUD study program semester 1 of STAIN Mandailing Natal, the use of audio-visual learning media was found to have several benefits as follows:

Table 4. Benefits of Using Audio-Visual Learning Media

No.	Benefit	Description
1.	Increasing student creativity	Through the use of audio-visual learning media, students become more creative because they exchange ideas, discuss, and work together in the process of making videos (Zahra Aqila, 2022).
2.	Improving students' knowledge of science and technology	Through the use of audio-visual learning media, students are more engaged in science and technology: they dig up a lot of information about how to make the videos they will display in learning (Lubis, 2022).
3.	Establishing social relationships	Through the use of learning media, social relations between students are closer and stronger because they will work together in making videos and sharing information about ways to make videos.
4.	Developing more effective and efficient lectures	Through the use of audio-visual media, lectures can run more effectively and efficiently; students are more enthusiastic and do not get easily bored.

Several benefits mentioned above highlight the importance of using audio-visual media in learning. These benefits will surely impact the process and learning outcomes.

Discussion

The audio-visual media used in presenting the material in this study was directly applied by the students. The students themselves designed and made the scenarios and the plots. Learning media here were used by students when presenting in class. The students who used to present their papers in front of their classmates now displayed the videos instead. After displaying the video, discussions took place among the students and the other groups. In this case, although the model for using audio-visual media is uncommon, the lecture process for the first-semester PIAUD students at STAIN Mandailing Natal still ran well.

Azhar Arsyad says learning media is an intermediary that carries messages or information containing intended messages. Based on this definition, it can be concluded that learning media is an intermediary or vehicle for delivering messages or lessons (Azhar Arsyad 2011). Gerlach and Ely provide broad and narrow definitions of media. Learning media includes any person, material, or event that provides opportunities for students to acquire knowledge, skills, and attitudes. Thus, media is not only an object or a tool used in learning. Even a teacher falls into this category. Meanwhile, Gerlach and Ely also define media narrowly as non-personal (non-human) means used by teachers to achieve learning process goals (Abdul Wahab Rosyidi, 2009).

According to Sumarno, audio-visual media has several steps in its use (Akmal Hadi Maulana 2014), which consist of a) Preparation, b) Implementation of learning/presentation, and c) Follow-up activities. This is done to strengthen students' understanding of the material presented using audio-visual media and to measure the effectiveness of learning.

In using audio-visual media, several factors need to be considered; apart from using technology properly, discussions, observations, experiments, exercises, and tests also need to be adjusted (Winarto, Ahmad Syahid 2020). This aims to make the process of using audio-visual media run as it should.

Previous research has shown that the obstacles that occur in the use of audio-visual media in learning are usually related to technical problems, such as the problem of connecting the LCD and the laptop high power consumption. Other obstacles include the problem of limited funds for infrastructure maintenance and lighting problems that affected the presentation using audio-visual media (Joni Purwanto 2014).

Observing first-hand the field of the use of audio-visual media by the first-semester students of the PIAUD study program at STAIN Mandailing Natal, the researchers concluded that audio-visual media not only made the lecture more enjoyable but also broadened the students' knowledge of science and technology. In this all-digital era, students need innovations that can excite their enthusiasm for learning. The lectures, which used to consist of only discussions and lectures, can now involve the use of the latest technology to create interesting and enjoyable lectures, as well as the proper use of audio-visual media.

Learning based on audio-visual media can facilitate the presentation of learning material, increase student motivation, and overcome the limitations of space and time (Susilana dan Riyana 2008). As a result, learning becomes wider and more open. The purpose of using audio-visual media is to develop cognitive abilities and to influence attitudes and emotions by providing stimulation and conveying messages in the form of dynamic images and sound. In this case, it can be said that the purpose of using audio-visual media in learning is to stimulate students to be more responsive during the learning process.

In this study, it was explained that one of the objectives of using audio-visual learning media for first-semester PIAUD students at STAIN Mandailing Natal was to increase student creativity, generate new ideas, and encourage innovation in the learning process to make it more interesting.

According to (Daryanto 2010), the functions of learning media include: clarifying the material presented, overcoming the constraint of space, time, and energy, generating passion for learning, and promoting learning independence. Learning by using audio-visual media is closely related to the senses of sight and hearing in that it can optimize children's sensory abilities in comprehending the material being discussed in the video. The goal is to develop cognitive abilities by providing stimulation in the form of moving images and sound, as well as to convey messages to influence attitudes and emotions (Ayu Fitri 2018).

Previous studies have shown that learning outcomes in classes that utilized audio-visual media were more effective than those without audio-visual media. This conclusion is supported by the finding that the average learning achievement in classes with audio-visual media, at 87.68, is higher than that in classes without image media, which is 79.59 (Hery Setyawan 2020). Therefore, it can be said that audio-visual media is more appealing since it is more interesting to use in the learning process. In other words, through the use of audio-visual media, the objectives of the learning process are more easily achieved.

In addition, some things need to be considered in the use of learning media, especially audio-visual media. The use of learning media must pay attention to students' age and learning content so that the students can easily comprehend the messages conveyed through these media since not all learning media can be used anytime and anywhere (Michael A Toledo, Rosanelia T. Yangco 2014). Consideration should also be given to the level of education in tertiary institutions.

In addition to students' age and level, it is also necessary to adjust the use of learning media to the theme or subject to be taught so that the process of absorbing knowledge is faster and easier.

Based on the objectives in Table 3, the benefits of audio-visual media for the learning process in first-semester PIAUD students at STAIN Mandailing Natal were as follows: 1) To attract students' attention in teaching material delivery by fostering learning motivation, and 3) To provide learning experiences by summarizing materials into a video.

Audio-visual media in learning can make it easier to convey and receive the lesson or information and can prevent misunderstanding. Besides, it also prevents boredom in learning. Some of the functions of learning media are 1) Semantic function, i.e., to help students understand the meaning of symbols that are cognitively demanding in learning; 2) Manipulative Function, i.e., to present an object or event that may not be available in the classroom; 3) Fixative function, i.e., to record, store, and review various events that occurred in the past; 4) Distributive function, i.e., to

convey information anytime and anywhere to students; 5) Sociocultural function, i.e., to overcome the differences among students so that the learning atmosphere in class remains harmonious; and 6) Psychological function, i.e., to develop attention (interest), affective domain (emotions), cognitive domain (understanding), psychomotor domain (skills), imagination, and motivation (Nunuk Suryani 2018).

Based on how it is used, media can be divided into 1) Projected media, such as films, slides, film strips, transparency, and any object which requires special projection tools such as film projectors, slide projectors (for slide films), overhead projectors (for transparencies), without which the media will not serve its function; 2) Non-projected media, such as pictures, photographs, paintings, radio, etc. (Armin Kohlrausch 2005). The use of audio-visual media can also support habit formation in the application of ever-developing science and technology in the world of education to add wider insights into education (Muhammad Ikhsan Mu'minin 2021).

Based on the results of this study, the benefits of students' using audio-visual media in class in delivering their material were to increase the creativity of the first-semester PIAUD students at STAIN Mandailing Natal. Creativity is an ability that reflects fluency, flexibility, originality in thinking, and the ability to elaborate on an idea (Utami Munandar 2012). One of the benefits of audio-visual media is that it promotes student-centered learning in which they do not only passively listen to teachers' or lecturers' explanations (Sanaky, AH 2021) but also conduct other activities such as observing, performing, demonstrating, etc. In addition, students can use technology properly and correctly, helping those who have difficulties understanding to understand and those who do understand to understand more. This way the learning process can run even more optimally.

CONCLUSION

The use of audio-visual media is suitable to increase the creativity of the first-semester PIAUD students at STAIN Mandailing Natal. In this study, the audio-visual media was developed by the students themselves, with the lecturer only providing themes, feedback, and directions. These videos were designed and compiled by the students themselves to be used in the learning process. One of the objectives of using audio-visual learning media was to increase student creativity, generate new ideas, stimulate innovation which can make learning more interesting, to increase knowledge, especially in the field of science and technology. As the lectures run more effectively and efficiently, students are more enthusiastic and not easily bored. The use of audio-visual media

has several benefits, as it helps increase student creativity, stimulates them to exchange ideas and generate ideas or materials in video making, creates students who are adept in the use of science and technology, and develops more effective and efficient lectures.

For further research in the area of audio-visual media, the researchers recommend a shift from the usual paper-based assignments to student-created audio-visual assignments, adding other available types of media.

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