

IMPLEMENTATION OF TECHNOLOGY-BASED LEARNING MEDIA: STUDENT ATTITUDES AND EXPERIENCES

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Abstract

It is an undeniable fact that nowadays most of the students can enjoy new technology that can be used without any time limit which can be used anytime and anywhere. This allows them to apply these technological developments in their lives, especially in the field of education or learning. This study aims to determine the attitudes and experiences of students in implementing technology-based media innovation in the learning process. The method and design in this research is to use descriptive qualitative research conducted through interviews and tracing relevant literature to answer this research and set forth in a descriptive form. The results of this study indicate that the implementation of technology-based media is very helpful for students in the learning process. The development of technology also increases the number of media that can be used. This makes students explore a lot of learning materials and their knowledge with a wide scope. The application of this media is considered effective to increase student interest in learning, with more and more media making the learning process more enjoyable. It is inevitable that this implementation has obstacles, however, it does not reduce students' initiative to apply technology to their learning process. The use of this technology also encourages students' creativity in the learning process. Apart from being a learning media, technology can be a tool and media in distributing material and providing convenience in communicating learning which of course has an effect on improving the quality of learning.

Keywords: Technology, Learning Media, Implementation, Attitude, Experience

INTRODUCTION

The development of technology was increase day by day. Along with the increase and development of science and technology. In the 21st century, technology plays a role in helping many aspects of human life. The increasing use of technology in everyday life also encourages people to live a more modern life where all needs and activities can be obtained and carried out online, without having to think about time and place. The development of this technology has penetrated many fields, not least in the field of education. This encourages education staff to be able to keep up with and keep updating about technology that might be used in the field of education. Budiyo (2020) argued that educators are the most important instrument to ensure the achievement of learning objectives based on and in accordance with indicators that adapt to the needs of students, including cognitive, psychomotor, and effective competencies. Zakso (2010) stated that teachers play an important and decisive role in every implementation of an education reform program. From the opinion of these experts, it does not mean that only teachers or lecturers play a role, but students are also one of the important parties in following technological developments. The development of abilities in the field of functional technology in students must continue to be improved so that students are technologically literate so that they can participate in the success of learning. Syarifudin (2020) stated that students play an active role in completing learning objectives that reflect indicators of competency achievement by carrying out instructions from educators. In addition, Effendy and Wahidy (2019) argued

that students are required to understand and be able to use technology that is implemented in the learning process.

Technology is certainly very important in the world of education. Effendy and Wahidy (2019) state that the role of technology for education is: mass media and electronic media as sources of knowledge and learning centers, giving rise to new learning methods, and supporting distance learning systems. The use of this technology can help improve the quality of learning, from the emergence of various innovations that can be applied in the field of education, one of which is media innovation and methods used in learning. In the current era of the industrial revolution, there are many platforms or technology-based media in the form of software or hardware that can make it easier for students or students in carrying out the learning process, such as using laptops, smart phones, YouTube, and many more which make all activities more effective. and efficient. Arsyad (2014) argued that the existing media in the learning process are defined as all physical communication equipment in the form of software and hardware which must be created or developed, used, and managed to assist learning needs in achieving the efficiency and effectiveness of the learning process. Coupled with the convenience provided, the learning process can be carried out without the need to meet each other or distance learning. Effendy and Wahidy (2019) stated that technological developments can allow the learning process to be carried out outside the classroom. This encourages students to explore their abilities in using technology in online learning.

The implementation of technology-based learning media innovation which aims to facilitate and assist educators and students in the learning process is certainly not easy, according to the notion of innovation itself is a new change towards other improvements or different from before, from this understanding we can conclude that the existence of innovation is the same as changing or upgrading previous habits with new things, therefore it is not uncommon for students to find obstacles or difficulties in using technology in the learning process. To find out the concerns and opinions of students, this paper aims to find out how the experiences and attitudes of students in using technology in the learning process, especially online learning to evaluate towards a better direction of using technology in the learning process.

A recent previous study has done on the topic (e.g., Wijaya et al. (2020)) claimed that online learning processes that indirectly involve technology-based media are considered less effective for students. The study stated that besides the methods and learning media used, the environment also affects students' learning process. In contrast to previous research that focused on the effectiveness of the media used for the learning process, this research focuses on revealing the attitudes and experiences that occur in students regarding the application of technology-based media.

Komunikasi et al., n.d stated that information and communication technology is a tool for data processing, including for processing data, obtaining, compiling, storing, and manipulating data. Communication and information technology is no stranger to society, making it an important thing for life. Its rapid development has made technology widely used in various fields, both in the fields of economy, education, social, culture, geography, religion, and many other fields. Technological developments can also be used as a means to show quality or improve the image of a nation. Indonesia also does not want to be outdone by other countries, as the times develop, information and communication technology in Indonesia also develops. This development exists because more and more students, professors, and great people are participating in helping to develop technology and information in Indonesia. However, Indonesian people's awareness of technological developments is still lacking where people prefer to use communication and information technology, but not many are interested in mastering and developing technology.

Riwayadi (2005) said that the backwardness of the Indonesian nation by other countries was caused by the lack of development of information and communication technology in Indonesia. The development of information and communication technology is seen as very important in Indonesia; therefore, Indonesia is currently required to further improve and develop information and communication technology. In its development, technology, of course there are obstacles such as high costs and limited supporting tools. However, being constrained by this, did not stop the initiative from various parties starting from the government, educational institutions, universities, the private sector, and the community to improve information and communication technology literacy.

In the era of the industrial revolution 4.0, technology development plays a large role in the education sector, especially in Indonesia. Technology and the world of education together take advantage of each other. The previous education system in Indonesia used the lecture method more where learning activities only focused on the teacher, students only had to listen to explanations and follow the instructions of the educator. The developments and advances in technology that are currently pushing the world of Indonesian education are increasingly upgrading in all respects starting from methods, media, teaching tools, teaching materials, and much more. The implementation of ICT in the field of education in Indonesia has certainly changed the education system. The most noticeable update is of course on teaching and learning methods and media, especially in learning English. Budiman (2012) argued that the application of technology in the world of education is able to create or make methods in learning more varied. The application of technology in learning helps students to further develop their knowledge as well as in skills. As explained in the introduction, the benefits of technology have an effect on bringing up more up to date learning methods and media, not only in the context of education in general but also in learning. At this time there are many media and methods in learning English that make it easier for students to learn, such as audio-visual, internet media (ig, YouTube, email, etc.), and communication media such as computers, smart phones, and laptops where these things friendly with the daily life of students and familiar. Cholik (2017) stated that the use of audio-visual, internet media, and communication media makes the learning process more fun and facilitates the search for information as well as teaching materials. In addition, the use of technology in learning does not limit the circumstances, time and scope of learning because with technology-based media and supporting tools we can carry out the teaching and learning process anywhere, anytime, and with anyone. Therefore, prompted this research is to conduct to find out what are students' experiences and attitudes toward the use of technology-based learning media in the learning process.

METHOD

This research is descriptive qualitative research, Cholik (2017) argued that qualitative is research where the data are not in the form of numbers, but data related to opinions, ideas, ideas, or beliefs about the object under study. The data collection in this paper was conducted using an interview method via the WhatsApp application platform which was conducted on three 6th semester English Education students. Participants will be asked several questions about their experiences and attitudes in using technology-based media innovations in their learning process. Interviews will be conducted through the voice note feature so that the data will be more detailed. This method is done because it adjusts to the current situation and it is easier to get the data because it can be done without being constrained by time and place. The primary data obtained in this study came from transcripts of interviews about the attitudes and experiences of participants in using technology as a learning medium. Meanwhile, secondary

data in this study were obtained from journals, official web sites, and other sources related to the topic being studied.

RESULTS AND DISCUSSION

Results

Based on the research conducted, it was obtained data that students were used to implementing information and communication technology-based media innovations in the learning process. The current condition that requires the implementation of learning to be carried out remotely is one of the factors for students to improve and use technological assistance in the lecture process, such as the use of laptops, the internet, and the use of applications that support distance or online learning. The development of technology that is increasingly developing makes many applications or technology-based tools that can be used in the field of education. There is a lot of hardware or software that can be used such as the Zoom application, Google Meet, Google Classroom, Edmodo, and many more. In addition, there is Microsoft office which can assist in processing data, numbers, presentations, and also words which of course become technology-based media that can assist in the learning process. As for the use of hardware such as laptops, smartphones, projectors, and others. students have also implemented many of these things in everyday life, especially in the field of education. This encourages students to feel accustomed to applying technology in the learning process. Participant 2 mentioned that

“Because many people have used the Zoom and Google Meet applications, it's not a new thing now; everyone uses these things.”

In the introduction and use of technology-based media to the learning process, it can be accumulated as much as 50:50 where the introduction of the media is obtained from the personal knowledge of students as well as contributions from teachers. They mentioned that sometimes the media is used according to the needs of each course or lesson. Therefore, teachers have their own special technology-based media to be used by students in the learning process. From the introduction and use of these media students contribute to further exploring and developing knowledge and skills in technology. This is used by students to find new information and complete assignments.

Based on interviews, the implementation of technology-based media resulted in differences in the learning process where learning was felt to be more effective and easier for students. The use of these media can be used by students in many contexts, such as reviewing material that has been given by the teacher and looking for additional information that may not be enough in the media book. As stated by participant 3 that

“Currently, in the era of sophisticated technology, when I apply learning media, the benefit is that there is much additional information, which may indeed be in a notebook or reading that lacks information, now from this media application I feel I got much additional information which is certainly useful.”

This statement further supports those technological developments are very useful in life, especially in the field of education. The implementation of technology-based media can increase the intensity of learning for students, in addition to a lot of up-to-date or latest information, media or platforms from technology can also make teaching materials or materials delivered in an interesting way, teachers can include audio visuals, pictures, or also videos in the delivery of material where it encourages student interest to focus more on receiving material. Besides, the advantages that can be felt by students are the use of technology-based media is not limited where students can carry out the learning process anywhere and anytime.

This shows that the use of technology is practical and efficient to use in helping students carry out the learning process.

But on the other hand, in the use of technology-based media in the learning process, there are difficulties faced by students. Constraints that are often faced are internet connections and the use of new features that are not yet familiar to students. The unequal internet connection in each region is the main inhibiting factor in implementing technology in the learning process where students cannot take part in learning because the internet is one of the important things in the distance learning process that is currently being carried out. As stated by participant 1

"Of course there are difficulties, for example internet disturbances that are not stable if you are in a virtual meeting, overall it's a problem with the internet factor."

This is a special concern in implementing technology in the learning process. Indirectly the internet is an important factor in the application of the media. In addition, another obstacle in implementing this technology is the difficulty in operating features or applications that are not familiar among students. This makes students unable to use learning support applications optimally which of course affects the learning process that occurs. Participant 3 revealed that

"There are bound to be difficulties, such as unknown or unfamiliar features. So in its use, it cannot be optimal"

The existence of obstacles did not dampen the enthusiasm of students to apply technology-based media in the learning process. The development of technology allows them to search for information independently to overcome existing obstacles, such as watching video tutorials for using these new features and looking for better providers in their respective areas.

The ease and practicality of applying technology-based media does not eliminate the old method habits of students. Some students prefer and like to use technology media in the learning process, however, there are also students who feel more comfortable with the old method. Starting from the system looking for information until the system writes the information. It is undeniable that the current learning process carried out online makes students less interacting with their classmates and teachers. This makes students prefer to do face-to-face learning rather than applying technology. They feel more active in offline activities where it is very possible that face-to-face learning is easier for students to understand because teachers can directly explain lecture materials. However, the implementation of technology-based media is not a bad thing for learning. The application and use of technology media can make it easier for students to find new information and of course more efficiently. As stated by participant 3

"Technology-based media is quite helpful, especially in finding information because with an unlimited reach in the sense that on the internet today, there is more and more information, the more complete it is. Of course, we can get it in the shortest possible time. We can find information from the outside without having to go directly into it, so many like the benefits of this information, especially in terms of efficiency in learning time."

The application of technology-based media is considered effective enough to improve the learning process which makes it easier for students to find learning materials, information, and communicate with each other. This technology-based media is something that needs to be continuously improved in the context of the system as well as its introduction. This is because it is not uncommon for students to feel that there are still many shortcomings in technology-based learning media in the learning process, especially in the classroom. Besides, the student's knowledge factor is also a supporter so that this technology-based media is implemented optimally.

Discussion

The role of learning media cannot be separated from the learning process. These two things are interrelated elements. Purwono, et al (2014) argue that in supporting the quality of the teaching and learning process learning media has an important role. Media can also make learning more fun and interesting. Learning media has an important role to make it easier for teachers to convey learning or material to students so as to facilitate the achievement of learning objectives that have been formulated. The development of technology also accompanies the development of learning media where there are many media tools and applications that support the learning process which are certainly more sophisticated and practical. Gagne and Briggs in Arsyad (2014) implicitly state that learning media includes tools that are physically used to convey the content of learning materials. These media include books, tape recorders, films, slides, photos, pictures, graphics, television, and computers. Based on this opinion, it can be said that the media is used to facilitate the process of delivering material in learning.

The implementation of technology-based learning media is certainly not foreign to students, coupled with the current situation that requires the learning system to be changed to distance learning, encouraging them to use technology assistance more often to follow the learning process that is being undertaken. In addition, teachers also have an important role in the introduction of learning media where students' understanding of the use of learning media is an important factor in maximizing the implementation of technology-based media. Firmadani (2020) argued that the presentation of effective and efficient learning materials can occur if teachers can use the media properly and appropriately so that students are more motivated to love the science they are undergoing. On the other hand, students based on their own initiative learn and implement technology-based learning media in their learning process which is to assist them in finding study materials as well as related information and indirectly improve their abilities in the field of technology. Learning media innovations are increasingly helping students in many contexts such as finding new information, reviewing explanations from teachers, and increasing student interest in learning.

Internet is one component of technology where the two things indirectly connect with each other. Based on the results of interviews, many students implement the internet as a tool for finding new information and also as a liaison in the lecture process. However, internet conditions that are different or even tend to be uneven are one of the obstacles in implementing technology in the learning process. This is perceived by students as something that prevents them from applying learning media in the learning process. In addition, another factor that makes it difficult for students to implement technology media in the learning process is the number of features or applications that are not familiar among students so that in the process of applying the media it is felt that it is not optimal. Although the application of technology provides many benefits for learning, it cannot be separated from various shortcomings. Mentioned in Bullen's (2001) critique, Beam (1997) the disadvantages of using technology, especially the internet, include:

1. The interaction between teachers and students is reduced which can slow down the formation of values in the learning and teaching process,
2. Ignore academic or social aspects but encourage the growth of business or commercial aspects
3. The learning process focuses more on training than on education
4. The teacher's role has changed from mastering conventional learning techniques, now being led to mastering learning techniques using technology
5. Failure of students who lack the motivation to learn

6. Limited internet access in certain areas
7. lack of skilled personnel in the field of technology
8. lack of mastery of computer language

It is undeniable that the lack of using technology encourages students to think that they prefer to use the old method rather than applying technology-based media in the learning process. However, this does not limit the student's initiative to apply technology to the learning process where they are helped by the practicality of using technology. Even the obstacles or difficulties they face encourage them to improve their skills in the field of technology, as well as the many platforms that help them to overcome this situation. Apart from the many obstacles in an innovation in learning media, of course these innovations exist to improve the quality of the learning process.

The wide range of use of technology helps in learning to make the process more efficient and effective, such as the results of interviews conducted, students feel that the implementation of the technology makes them get more information from outside which is certainly beneficial for learning. The application of technology is also felt to increase learning motivation because with these media teaching materials and learning materials can be presented in attractive packaging so that the learning process is more fun and student learning motivation is greater. Media or technology-based tools in supporting learning must always experience development and improvement so that the quality of learning is also increasing.

CONCLUSION

The application of technology-based media is no stranger to the field of education, where rapid technological developments encourage learning media to also develop. At this time, many technology-based media have been applied to learning to help the learning process. The role of technology is very influential for the ease of students in finding information, looking for various learning materials, and making it easier for students to communicate in the context of learning. In addition, the benefits that can be felt by students in the application of technology media are the amount of new information that can be obtained practically and efficiently for learning. The introduction of technology-based media is carried out on the initiative of students or even has the intervention of the teacher. The many benefits of technology, especially in learning media, do not eliminate any shortcomings or obstacles in its implementation such as limited internet access and features that are less familiar to students so that implementation is not optimal. the old method compared to applying technology in the learning process. However, this does not reduce the students' initiative and enthusiasm in using technology as their learning medium. Students have their own way of dealing with existing obstacles, such as watching tutorials on the YouTube application, or choosing a good provider in their area so that the use of technology can still be applied. With media technology, of course, it makes a difference in the student learning process. Which initially used lecture media by the teacher, now learning can be obtained from anywhere without any time and place restrictions. The implementation of technology-based media is felt by students to be able to increase their motivation and learning intensity, in addition to a lot of up-to-date or latest information, media or platforms from technology can also make teaching materials or materials delivered in an interesting way, teachers can include audio visuals, pictures, or also videos in the delivery of material where it encourages student interest to focus more on receiving the material. Of course, in its development, technology is felt to be further improved in the context of infrastructure and systems, especially in the classroom and learning process, so that the application of technology-based media can improve or improve the quality of education and learning that already exists.

ACKNOWLEDGMENTS

The researcher would like to thank Allah SWT, my parents, and Mrs. Ine Rahayu Purnamaningsih, M.Pd.

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