

## The Effect of Learning Media in Pandemic Times on Education

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### Abstract

*Media as a component in a learning system has a very important position in the learning process. Therefore, the purpose of this study was to determine the effect of learning media in improving the quality of learning. The research method is the research method used by the researcher is an experimental method with a pre-experimental design. Researchers used a quantitative approach. The experimental method in this study was used to measure the changes that occurred after the treatment. The result of this study is that the influence of learning media during the COVID-19 pandemic has proven to be effective in increasing student learning outcomes.*

### Keywords

learning media;  
pandemic; education



## I. Introduction

In human life, education is a very important factor. Education can affect a person's economic condition and quality of life. Not only that, education can be used as an indicator to measure the quality of a nation's human resources. So that the achievement of learning objectives in an education is mandatory to do. One way that can be done to achieve the success of learning objectives is to use learning media. For an educator, learning media can be used as a tool to deliver planned material. One of the benefits of using learning media is that it makes it easier for an educator to explain the material presented so that learning objectives can be realized. Especially with the Coronavirus Disease-2019 (COVID 19) pandemic, all school programs from the curriculum field will experience learning changes. The change certainly leads to the Online Learning System (On the Network). From this pandemic, all educators and students will be required to enter the world of technology. Based on the Circular of the Chancellor of the University of Palangka Raya, No. 11/UN24/LL/2020 concerning Prevention of the Development and Spread of Corona Virus Disease (COVID-19) in the educational environment. For the prevention and development of COVID-19. Then all educators and students will be required to enter the world of technology. Based on the Circular of the Chancellor of the University of Palangka Raya, No. 11/UN24/LL/2020 concerning Prevention of the Development and Spread of Corona Virus Disease (COVID-19) in the educational environment. For the prevention and development of COVID-19. Then all educators and students will be required to enter the world of technology. Based on the Circular of the Chancellor of the University of Palangka Raya, No. 11/UN24/LL/2020 concerning Prevention of the Development and Spread of

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Education has a very important role in today's life. This is because education is a place to improve and develop the quality of human resources. As in Article 11 of the Republic of Indonesia Law Number 20 of 2003 concerning the National Education System (SIDIKNAS) it is written that education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control. Intelligence, noble character, and skills needed by himself, society, nation and state. Education is expected to be able to answer all the challenges of the times and be able to foster national generations, so that people become reliable and of high quality, with strong characteristics, clear identities and able to deal with current and future problems (Azhar, 2018). Education and skills are the main keys in gaining social status in community life (Lubis et al, 2019).

The positive and negative impacts of the development of technology and communication today also affect the development of education in Indonesia and Islamic education in particular. Higher education is the highest educational institution, naturally to provide a quick response to the various demands of the progress of the era. Education is not only a vehicle for the transfer of knowledge but also the transfer of technology and what is more fundamental in Islamic education is the transfer of value.

(Rahmi, 2020) in terms of bridging teaching and learning activities so that they are carried out better, it is necessary to have innovations in which the use of learning media is one of the opportunities so that education can still be delivered to students. Even though it is not easy, this is the only thing that can bridge the implementation of education in the midst of the current epidemic. According to Sururi in his journal Rahmi explained that innovation is also defined as a new idea that is felt by various parties, either individually or in groups. This idea can be seen from what information technology produces.

Media as a component in a learning system has a very important position in the learning process. Learning media is used in an effort to improve student understanding in learning. Where after determining the choice of media to be used can provide understanding to students in the learning process effectively.

(Mukarromah, 2016) states that from some of the existing problems by continuing to see opportunities for a more advanced and developing world of education, here it is necessary to have the latest innovations to advance the existence of education. Not only in the field of curriculum / facilities and infrastructure, but in other fields that need attention, such as the development of information technology in teaching and learning activities. At the beginning of independence, there was a policy in the transformation of learning materials through television and radio broadcasts, this could provide opportunities for education and improve the quality of higher education.

Media as one of the forms and channels used by people to distribute messages/information (AECT). Media are various types of components in the student's environment that can stimulate him to learn (Gagne). Media are all physical tools that can present messages and stimulate students to learn, such as books, films, television, internet and so on (Briggs).

(Herliandry et al., 2020) The Covid-19 outbreak urges testing of distance education almost as never before for all elements of education, namely students, teachers and parents. Considering that during the pandemic, time, location and distance are big problems right now. So that distance learning is a solution to overcome difficulties in carrying out face-to-face learning. A challenge to all elements and levels of education to keep classes active even though educational institutions have been closed.

In the midst of the current pandemic, digital learning media is now the main choice for teachers in teaching. Teacher skills in using digital learning media are very important for teachers to create interactive learning and can attract students' attention in the learning process. Thematic learning by using digital learning media, teachers must have high creativity so that they participate in updating their experiences in the advancement of digital learning. One of the solutions offered to boost or improve student learning outcomes is to try to increase student involvement in learning. Therefore, learning media are needed that are in accordance with the student's circumstances.

Learning media is a means of delivering learning messages related to the direct learning model, namely by the way the teacher acts as a transmitter of information and in this case the teacher should use various appropriate media. Learning media is a tool for teaching and learning process. Everything that can be used to stimulate the thoughts, feelings, attention and abilities or skills of the learner so that it can encourage the learning process.

According to Heinich quoted by Azhar Arsyad (2011: 4), learning media are intermediaries that carry messages or information for instructional purposes or contain teaching purposes between the source and the recipient.

The implementation of this policy makes online applications such as Zoom Cloud Meeting (ZCM), Google Meet, and software such as E-learning the right alternative to carry out the learning process so that it continues even in a pandemic. The development of ICT (Information and Communication Technology) is very useful in the current pandemic conditions, especially in the 21st century technology becomes public consumption or can be called the primary need of the world community. With technological sophistication that is growing so rapidly, therefore we are required to be active and participatory in following technological developments and it is undeniable that technology today has such a significant impact on human life. Coupled with the Covid-19 pandemic, which requires all elements of society to carry out activities from home (work from home). Likewise with education, which requires to carry out online learning. Where online learning has previously been implemented in the world of education, but only in a few institutions or institutions. With the current pandemic conditions, inevitably all institutions and educational institutions implement online learning so that the learning process can continue. Online learning is a new innovation for education in the 21st century, namely to improve the quality of education in responding to the challenges of the global world.

Digital learning media is one of the learning tools that must be owned and used by a teacher when teaching in today's era. With the use of digital learning media, learning will be more interesting and easily understood by students. Therefore, the use of digital learning media is very influential in learning.

(Darmawan, 2014) The use of media is used as one that can be used in a systematic learning process from educators to students. Utilization principles are also related to learner characteristics. A person who is learning will need the help of visual or verbal skills in order to benefit from practice or learning resources. (Rohmat, 2016) In this case it is explained that the use of learning media is a part that needs the attention of learners in every learning activity. Therefore, learners need to learn how to determine learning media in order to effectively achieve learning objectives in the teaching and learning process.

Based on the explanation above, the purpose of this study is to determine the effect of online learning media during the pandemic.

## II. Research Method

According to Sugiyono (2010) the research method is a scientific method carried out with the aim of obtaining data for certain uses and purposes. When conducting this research, it is necessary to have a method or steps that must be passed by a researcher when solving a problem in order to achieve the goals to be achieved by the researcher.

The research method used by the researcher is an experimental method with a pre-experimental design. Researchers used a quantitative approach. The experimental method in this study was used to measure the changes that occurred after the treatment. The sample in this study were FKIP UNIQHBA students totaling 20 people. As for the initial process in conducting this research, the researcher gave a pretest (pretest) to the students in order to determine the extent of the knowledge possessed by the students. After being given the initial test, the researcher conducted an experiment by giving treatment in the form of distance learning. Distance learning or online with zoom meeting media. The final activity that the researcher did was by giving a final test (posttest),

## III. Results and Discussion

**Table 1.** Data on pre-test and post-test scores

No	Statistics	Pre-Test	Post-Test
1	Number of Students	20	20
2	Number of low scores	40	50
3	Average value	50	60
4	Number of high scores	70	90
	Average	45	60

Pretest data shows that student learning outcomes tend to be low. Meanwhile, after the use of interactive learning media, it can be seen from the posttest data which shows that there is an increase in learning outcomes.

After doing the test, it was found that the data from the pretest and posttest in this study were normally distributed, so that the next data test used a parametric statistical test, namely the T-test for two paired samples. The T test in this study used the Minitab application. Testing this hypothesis is done to find out whether there are differences in student learning outcomes with the use of learning media on learning outcomes. The criteria for the T-test results for two paired samples are if the P-Value then  $H_0$  is rejected, which means that there are differences in student learning outcomes with the use of learning media. Meanwhile, if  $P\text{-Value} > \alpha$  then  $H_0$  is accepted, which means that there is no difference in student learning outcomes with the use of learning media.



In essence, learning is a communication process, namely the process of delivering messages from the source of the message through the channel or media to the recipient of the message. Message, message source, channel or media, and message recipient are the components of the communication process. The message to be communicated is the content of the teachings or upbringing contained in the curriculum, the source of the message is lecturers and students and even other people. Learning media is one of the important topics in the learning process.

The COVID-19 pandemic has changed various aspects of human life today, especially in the world of education. Online learning is an effective solution to activate classes even though schools have been closed considering that time and place are a risk during this pandemic. However, this learning technique is important to evaluate according to local conditions considering the distribution of facilities and the ability of parents to provide different online learning facilities to students. The results of learning through media show that online learning systems by utilizing digital programs tend to change the face of educators in a better, effective and fun direction. Lecturers and teaching staff are becoming more innovative in packaging teaching materials and more creative in developing learning methods to attract educators.

The data from the pretest results show that the learning outcomes of students tend to be low. Then after being treated with the use of interactive learning media to students, it showed that there was an increase in learning outcomes. This proves that the treatment used by using interactive learning media to improve learning outcomes is quite successful. This is in line with what was said by (Stanescu, M. Stoicescu, M. Ciolca, 2011) that the use of ICT will make the learning process effective. Because with the occurrence of effective learning, it will increase the information provided through visual, audio and kinesthetic learning methods in learning.

There are several problems or obstacles faced by students in the implementation of distance learning, such as costs, learning motivation, service, feedback, lack of experience and habits (Attri, 2012). Distance learning is considered no better than learning that is carried out in person or face-to-face (Fojtík, 2018). Lack of effective interaction, lack of organization is one of the obstacles to distance learning, effective distance learning must of course be supported by the content provided, internet connection facilities and considerable attention and availability (Buselic, 2012). Therefore, the use of learning media in its application affects the learning and thinking that is going on (King et al., 2001).

The use of non-interactive learning media, not dancing will make it difficult for students to increase their learning motivation, so interactive and interesting learning media can produce good student achievement (Handhika, 2012). Of particular concern in the implementation of distance learning, such as in remote areas or areas that do not have an internet connection and limited ownership of technology must be a big obstacle because educators and schools do not have adequate facilities and facilities for the distance learning process (Basilaiia & Kvavadze, 2020). Therefore, the determination of learning media is very influential on learning.

Educators and students must have the desire and ability to utilize the technology used in online learning. Online learning will also achieve learning objectives if the approach taken in learning is appropriate and in accordance with what students need.

Putting technology to good use as a solution in these difficult circumstances. Technology as a liaison for human interaction even though the distance separates so that it can help human needs. Therefore, the government establishes online learning that maximizes the use of technology. It does not only affect student learning outcomes but also affects the mentality of students. The emergence of perceived boredom is due to several factors, namely, learning that is too monotonous, less varied, too many tasks given by the teacher, unable to interact directly with teachers and friends, and an ineffective learning system so that the material is difficult to understand. The effect of the emergence of learning boredom on students results in behaviors that arise such as irritability, easily hurt, and easily frustrated. This is a symptom of mental exhaustion. Mental fatigue cannot be eliminated quickly, therefore it is the main factor that results in the emergence of learning boredom. The causal factor also comes from teachers who do not understand technology so that teachers are less skilled in developing learning, lack of teacher ability in managing learning which can affect students' cognitive, affective, and personal. Home learning carried out by students requires honesty and high discipline because home conditions affect the concentration of students' learning, especially students. The causal factor also comes from teachers who do not understand technology so that teachers are less skilled in developing learning, lack of teacher ability in managing learning which can affect students' cognitive, affective, and personal. Home learning carried out by students requires honesty and high discipline because home conditions affect the concentration of students' learning, especially students. The causal factor also comes from teachers who do not understand technology so that teachers are less skilled in developing learning, lack of teacher ability in managing learning which can affect students' cognitive, affective, and personal. Home learning carried out by students requires honesty and high discipline because home conditions affect the concentration of students' learning, especially students.

Digital transformation in Indonesia's education sector is not something new that has been implemented for the first time. Various efforts and supporting regulations have been deployed and implemented to improve and enhance the Indonesian education system. This is in line with Indonesia's efforts to pursue the digitalization era 4.0, in which all aspects of life cannot be separated from the touch of technology, both from the industrial sector, trade, tourism, and including education which must be able to internalize technological sophistication in order to improve the quality of education and so that its existence remains. in a disruptive era.

From the learning media that are widely used in distance learning or online learning today such as ELearning, Zoom Cloud Meeting (ZCM), Google Meet, and Google Classroom as the right alternative for lecturers and students in order to be able to carry out a broader teaching and learning process during a pandemic like today. The above media is one of the external factors that has a major influence on learning achievement, and in

general this learning media facilitates interactions between educators and students, educators with fellow educators and students with other friends who can communicate and interact actively and communicatively.

Sometimes humans tend to reject new things such as online learning through various platforms. There are several studies that online learning can actually improve student learning outcomes. This is also if students are actively involved in the learning process. The use of online media can make learning more interesting so that students' enthusiasm for learning increases. In practice, online learning can improve students' understanding of learning materials. The use of online media such as e-learning, google classroom, zoom, google meet, edmodo and others, can reduce student boredom in conventional learning, can also stimulate skills in critical thinking and independent study (Sulisworo et al., 2017).

Provide a wide space for students / students to be able to explore all the knowledge they want to learn. The role of teachers as facilitators as well as mentors and learning directors in this network can in fact improve student learning outcomes (Meidawati and Veteran Bangun Nusantara Sukoharjo, 2019) Based on research conducted by FKIP students, Qamarul Huda Badaruddin University resulted in the conclusion that online learning has a significant impact positive for students.

#### IV. Conclusion

The influence of learning media during the covid-19 pandemic has proven to be effective in increasing student learning outcomes. Online learning media during the COVID-19 pandemic can be used to assist educators or lecturers in conveying information or knowledge that will be conveyed to students or students who currently do not allow face-to-face lectures.

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