ISSN 2302-0059

# THE ROLE OF MULTIMEDIA IN LEARNING THE FIELD OF CHRISTIAN RELIGION STUDIES ON STUDENT LEARNING CREATIVITY DURING THE COVID-19 PANDEMIC

Bangun Munte<sup>1\*</sup>, Nurliani Siregar<sup>2</sup>, Imelda Butarbutar<sup>3</sup>, Bangun<sup>4</sup>, Jojor Silalahi<sup>5</sup>, Janwar Tambunan<sup>6</sup>

> 1\*,2,3,4,5,6HKBP Nommensen University Medan, Indonesia Email: Bangunmunthe@uhn.ac.id

#### ABSTRACT

#### **Article Info**

Received: 23/10/2022 Revised: 30/10/2022 Accepted: 12/11/2022 The purpose of this study was to see how far the Role of Multimedia in Learning in the Field of Christian Religion Studyed on Student Creativity During the Covid-19 Pandemic. The number of samples is 38 people. This study uses a descriptive method, while the data analysis carried out in the hypothesis research is Pearson's product moment correlation with the data collection tool is a questionnaire for Variable X (The Role of Multimedia in Learning the Field of Christian Studies) and Variable Y (Student Learning Creativity). To find out the extent of the Role of Multimedia in Learning the Field of Christian Religion Studies on Student Creativity During the Covid-19 Pandemic, the Pearson Product Moment Correlation Statistics test. From the test results, it was obtained that the correlation (r) was 0.36 with a determination test of 12,  $(\alpha) = 0.05$  then a "t" test is held with the test criteria if the t count obtained from the calculation is greater (>) than ttable at a significant level of I 0.05 with dk = n - 2 then the hypothesis is accepted and in other cases rejected. From the test results obtained toount > ttable (2.30 > 1.69), then the hypothesis is accepted. Thus, it can be stated that there is a meaningful role between the role of Multimedia in Learning the Field of Study of Christianity Against Student Creativity During the Covid-19 Pandemic.

Keywords: Role, Multimedia, Student Creativity, Covid-19

#### 1. INTRODUCTION

At this time during the covid-19 pandemic, in an effort by the government to reduce the number of cases of Covid-19 transmission by issuing a policy in the form of an Adjustment to the Joint Decree of the Four Ministers concerning Learning Guidelines during the Covid-19 period, which contains a prohibition on holding activities that cause crowds and gatherings of people. in large numbers, so that many public facilities are closed such as malls, and schools which as a result the learning process cannot be carried out as usual such as face-to-face in the classroom and direct communication between teachers and students, so this condition makes the learning process must take place virtually / Virtual / online or what is called distance learning communication, the teaching and learning process takes place from their respective homes, which is where the distance learning process is 100% dependent on the use of media as educational facilities and infrastructure to be able to connect between teachers and students so that the learning process can take place properly and correctly. (van Thao, Herman, Napitupulu, Hien, & Pardede, 2021).

However, in reality there are still many schools that have not equipped multimedia tools and even if there are tools, the problem is that many teachers are still not proficient in operating Multimedia (gaptek), so this will hamper the learning process virtually (online) which also affects students' delays. to develop their creativity(Munthe, Herman, Arifin, Nugroho, & Fitriani, 2021). This has happened



ISSN 2302-0059

because schools have been too long and teachers have only used teaching models in the form of lectures and teachers have become the only center in giving messages so that students are only recipients and passive, even though the Ministry of Education and Culture has long suggested that schools through educators use multimedia. in the learning process that aims to attract students' interest and can increase student creativity.

The term multimedia is etymologically derived from the words multi and media. Multi means many or plural and media means a means to convey messages or information such as text, images, sound, video. So linguistically the term multimedia is a combination of many or several media such as text, images, sound, video that are used to convey messages or information.(Herman Dwi Sujono, 2017:2). At first humans communicated through their voices which could be heard at a limited distance, plus the movements of their hands. Then he created various methods and tools such as arranging stones or breaking wooden branches to give certain signals to his friends. After that he made a symbol in the form of objects that could be carried from one tribe to another to declare war or peace. In Indonesia, the complete cerana containing betel nut is still a symbol to convey the desire of a pure heart at various ceremonies.

In order to communicate over long distances, thousands of years BC the Greeks had used torches as a signal that could be seen from afar. The Indians used smoke. Then people scrape a piece of wood so that it can make a sound when it is beaten and the sound can be heard from afar. To this day, the Ashanti people of Ghana still use such wood to deliver news to faraway places. In Indonesia, the tongs are still a tool to summon people to gather or to declare danger. This simple communication then escalates into written communication.

Written communication is born in various ways and forms in various parts of the world. Also in Indonesia it is a long series, over time and shows that written communication is a basic condition for the progress of mankind(Herman & Pardede, 2020). At first, written communication was not letters strung together into words, but a very simple series of pictures accompanied by very simple signs called Pictographs, which were created by the Indians from the Puna people of Panama. This pictograph contains "text" to be performed by ritual singers, so that the spirit of a person who is sick does not leave his body, the text is read from top to left and continues to the line below from the left and so on. In an ancient city called Nineva in present-day Iraq, experts discovered a library consisting of 25,000 plates containing an arrangement of lines in the form of nails so that they were called cuneiform.

With the creation of the alphabet around 1000 BC, besides being able to record important events, humans can also send news to distant places. From this important event a very long time passed, namely 2500 years before humans came to a major discovery in the art of communication. The discovery in the form of a printer became the pioneer of today's printing press. This happened in 1456 and the inventor named Johan Guttenberg in Germany. After that mass communication did not remain silent on symbols of words only. This development was followed by pictoral communication, namely communication that utilizes realistic images. Through scientific discoveries and improvements in the lens system and reproduction in the field of photography, photographs are now seen everywhere.

Through films, young and old alike, those who can read and those who are illiterate can receive new knowledge. To get closer to the real experience, humans perfected the invention of color photography. The improvement continues until now, both in the field of producing photos, as well as slides, films and television. In 1844, after 400 years of Johan Gutenberg's printing press, Samuel FBMorse sent news via wire from Baltimore to Washington, thus telegraphy was born. Then Alexander Graham Bell on February 14, 1875 for the first time had a telephone conversation. And since Guglielmo Marconi for the first time in 1896 sent and received messages wirelessly, electronic communication has advanced tremendously. Nineteen years later the human voice can be broadcast throughout the world via radio. In 1930 television allowed someone to broadcast not only sound.

Because the means of communication are so advanced, it is no longer appropriate to convey teaching, information and counseling in a verbal manner or with mere words. Teaching, information and counseling must be in line with the progress of the way humans communicate. Therefore we are



ISSN 2302-0059

obliged to mobilize all means and resources to use all available tools to make teaching, information or counseling effective.

Multimedia is a tool that is "audible" meaning it can be heard and tools that are "Visible" means it can be seen. Multimedia tools are used to make communication effective. The goals of communication that we discuss in this study are teaching, information or counseling. Among the multimedia includes pictures, photographs, slides, models, cassette tapes, tape recorders, computer sound films and television. The history of using multimedia tools for education is not new, it is as old as education itself. Since more than three thousand years ago a father taught his children to fish by taking him to the river or sea with a spear and directly showing him how to do it or showing him how to set a snare. Likewise a mother teaches her daughter to cook, not with a description of the words, but immediately told to do it by involving the five senses of the child. Ancient Greek and Roman educators took their students on excursions to observe real-life situations and use real objects as visual tools or props. However, after written communication developed, the way of teaching actually led to the use of mere words, both written and spoken.

The western world considers the use of multimedia tools in schools as early as Comenius, a prominent Czechoslovak educator who lived in the twelfth century. He denounced teaching and mere words and urged the use of pictures as well so as to engage the minds of those who are learning more. Cemonius also created a picture textbook called "Orbis Picts" which means "World in pictures". The pictures are an integral part of the lesson presented. This is the first picture textbook. The famous French philosopher Rouseau advocated direct experience in nature in learning as nature intended. He said: "that children pay attention to nature, it will immediately arise the desire to investigate,"

Visual tools such as pictures, maps and globes have long been used before the use of modern multimedia tools. The modern use of multimedia tools actually only started after the use of 16 mm film proved its usefulness in training members of the United States Armed Forces in the Second World War. During the war it was also proven that apart from pictures, maps and globes, multimedia tools such as slides, sound recordings and various projectors could increase teaching efficiency between 25% and 50%.

In Indonesian, "multimedia education" means multimedia tools as inseparable from an educational process. There are also those who call it "sensory aids", meaning the five senses, perhaps the closest to the target is "multimedia" with the understanding of communication through multimedia tools". And also said: "the field of multimedia includes all the tools used in the study room or in other learning systems to facilitate the understanding of words written or spoken". With regard to audio-visual tools only, there are limitations or definitions as follows:

- 1. Visual education means nothing other than the presentation of knowledge through "seeing experience".
- Visual education is a method for conveying information based on the psychological principle which states that a person gets a better understanding of something he sees than something he hears or reads.

According to several factors in the philosophy and history of education, what we know, precisely knowledge is transmitted to the brain through one or more senses. Many experts argue that 75% of human knowledge reaches the brain through the eyes and the rest through hearing and other senses. However, whatever the meaning given to these multimedia tools, what should not be forgotten is that they are merely aids that must be used appropriately and skillfully in the teaching and learning process.(Amir Hamzah Suleiman, (1981:2-12)

The relation that learning requires interaction, this shows that the learning process is a communication process, meaning that in it there is a process of delivering messages from a person (the source of the message) to a person or group of people (the recipient of the message), Kemp (1975:15) describes the communication process as follows:



ISSN 2302-0059



The message sent is usually in the form of information or information from the sender (source) of the message. The message is changed in the form of codes or symbols such as words, sounds, pictures and so on. Through channels (channels) such as radio, television, OHP, film, commuting, messages are received by the recipient of the message through the senses (eyes and ears) to be processed, so that the message conveyed by the messenger can be received and understood by the recipient of the message.

Schools are not ready to use multimedia devices to support effectiveness in the learning process, especially teachers who are less competent in operating media, while in online learning (online) learning depends entirely on multimedia so that learning continues. Therefore schools and teachers must be aware of and improve themselves by increasing their ability to operationalize multimedia so that learning can run well. Therefore the Role of Multimedia is very important to study so that we understand and realize the magnitude of the Role of Multimedia in PAK Learning on Student Learning Creativity at SMA Negeri 3 Pematang Siantar During the Covid-19 Pandemic

#### 2. METHODS

The definition of the method comes from the word methodos (Greek) which means a way or towards a path. The method is a scientific activity related to a (systematic) way of understanding a subject or object of research, as an effort to find answers that can be scientifically justified and include their validity.

According to (Herman, Shara, Silalahi, Sherly, & Julyanthry, 2022), research is a scientific activity related to analysis and construction which is carried out methodologically, systematically, and consistently. Drawing conclusions from this discussion, that the systems and methods used to obtain information or materials for a scientific knowledge called "scientific methodology" to use the research methodology used in solving research problems, it is necessary to briefly explain the operational definition of independent empirical variable indicators. (X) and the dependent variable (Y).

This type of research method is closely related to the method used in research. The method used is descriptive research method, which is deliberately designed to analyze and interpret data and determine the relationship or influence of the independent variable (X) on the variable (Y), then draw conclusions about the data collected and analyzed. Descriptive Research Method is a method of specifically examining a group of people, a system of thought, or a class of events at the present time which aims to make a systematic, factual and accurate description, picture or painting of the facts, characteristics and relationships between phenomena investigated.

In line with what was stated by Arief Furchan (1982; 53) said the descriptive method is to describe and interpret the current situation and with respect to the existing conditions or relationships, current practices, state of view or attitude. Processes that are taking place, influences that are being suggested or trends that are developing.

In line with that Surahman (1972:32) says that the descriptive method is a research method aimed at solving problems that exist in the present as well as solving actual problems. Sri Sumarni (2012; 2016) also said "Quantitative Research is a process of finding data in the form of numbers as a tool to find information about what we want to know". Quantitative research can also be in the form of relationship or correlation research, quasi-experimental research, and experimental research. So it is clear that the quantitative descriptive research method is a method of researching in obtaining data on the current state.

This research is entitled about the Role of Multimedia in PAK Learning on Student Creativity. The research location is SMA Negeri 3 Pematang Siantar.

ISSN 2302-0059

## 1. Population

(Ary, Jacobs, Sorensen, & Razavieh, 2010) states that the population is a number of objects that will be used as a data source. Basically the population is all the values or measurements of quantitative and qualitative, regarding certain characteristics of all members of a complete and clear collection whose characteristics you want to study (Sujana, 1986; 5). The entire research object as described above is the research population, while the objects taken from the entire object under study are considered to represent the population and are taken with certain techniques as research samples. The technique used to take a sample from the population is called the sampling technique.

The population is a generalization area consisting of objects or subjects that have certain quantities and characteristics determined by the researcher to be studied, and then a conclusion is drawn (Sugiono, 2009;117). From the research results of SMA Negeri 3 Pematang Siantar, there were 45 students consisting of 18 women and 24 men.

In this study, the research population was students at SMA Negeri 3 Pematang Siantar. And more details can be seen from the table below.

Table 1. The state of the population

	Gender		
Class	Man	Woman	Amount
XI IPA-1	7	17	24
XI IPA-2	8	6	14
Amount	15	23	38

(Source: State of the statistics of SMA Negeri 3 Pematangsiantar students)

### 2. Sample

The sample is the smallest part of the population. And sampling is not done haphazardly, because the sample must represent the entire population, meaning that all characteristics of the population to be studied should be reflected in the sample taken or called representative (Sudjana 1984; 6). The sample is part of the number and characteristics possessed by the population (Sugiono 2009: 118). Sudjana (2005; 6) also says "the sample is the smallest part of the population" the sample must be able to represent the entire population, meaning that all characteristics of the population to be studied should be representative in nature from the entire sample taken using a certain method, the sample must be representative of the entire existing population.

Table 2. Sample

Class	Gender		
	Man	Woman	Amount
XI IPA-1	7	17	24
XI IPA-2	8	6	14
Amount	15	23	38

Hypothesis testing based on a model, data collection needs to be carried out. The data is in the form of (type) quantitative. Data is a description of a thing, it can be a thing that is known, or that is considered. In other words, a fact that is described through numbers, symbols, codes, and others.

## Data is Variable

- 1. Discrete data, is exact data or nominal data obtained through calculations. Nominal data is usually obtained from exploratory or survey research.
- Continuum data, is data that can have values located in an interval, and obtained from the results of measurements of length, outside, weight, and time (ordinal, interval, and ratio data)



ISSN 2302-0059

- Data according to the source and collected, this data is divided into two (2), namely internal data and external data:
  - Internal data, data collected by the institution regarding internal activities and the results are used by the person concerned.
  - External data, data obtained from outside sources. This external data, usually divided into primary data and secondary data:
    - Primary data(primary data), is data collected directly from the source and processed by the person concerned for use. There are two methods used for primary data collection, namely through surveys and observations.
    - 2) Secondary Data(secondary data), is research data obtained indirectly through intermediary media (generated by other parties) or used by other institutions that are not processors, but can be used in a particular research. Secondary data is generally in the form of records or reports of documentation data by

## 3. RESULTS AND DISCUSSION

certain institutions that are published.

From the results of data calculations and hypotheses, it can be stated that research findings:

- After testing the normality of the data on data X and data Y as one of the requirements for the following data analysis, it turns out that data X and data Y are each normally distributed. The data normality test has been carried out using the Chi squared formula (X2) table with a level of significance = 0.05, namely:
  - For data X (The Role of Multimedia in PAK Learning) X2 count ==222,9355 while X2 table =51.00. This means that the X data (The Role of Multimedia in PAK Learning) is in a normal distribution or the X data comes from a normally distributed sample.
  - For data Y (Increasing the Learning Creativity of Class VIII A and VIII B PAK Students) Y2count = 6.59 while Y2table =51.00, meaning Y data (Student Learning Creativity during the Covid-19 Pandemic in Class XI IPA 1-2 SMA Negeri 3 Pematang Siantar) is in the normal distribution or Y data comes from normally distributed samples.
- Data analysis Hypothesis Testing
- Correlation coefficient

Results that obtained from the correlation coefficient is 0.36 which means The Role of Multimedia in PAK Learning on Student Learning Creativity during the Covid-19 Pandemic in Class XI IPA 1-2 SMA Negeri 3 Pematang Siantar, then the hypothesis is accepted.

- Correlation significant test
  - Aftercalculations were carried out, the value of tcount = 2.30> ttable = 1.69 which means that there is a good relationship between The Role of Multimedia in PAK Learning on Student Creativity during the Covid-19 Pandemic in Class XI IPA 1-2 SMA Negeri 3 Pematang Siantaris present and significant.
- Coefficient of Determination Test

The Role of Multi Media in PAK Learning has an influence of 13% in Realizing the Affective Learning Outcomes of PAK Students. This relationship was found by the coefficient of determination  $r^2 = 0.362.100\% = 12.96\%$ . This means that the higher the integrity of the X variable, the higher the effect on the Y variable.

- Simple Linear Regression Forms
  - The functional relationship between variable X and variable Y is obtained which is expressed in the form of a regression equation, namely; Y = 1,60 + 0,35
  - This means that for every increase in a unit of X, there will be an increase in Y of 1.95. In other words, if the Role of Multimedia in PAK Learning plays a better role, the higher the results



ISSN 2302-0059

obtained in connection with learningStudent Learning Creativity during the Covid-19 Pandemic in Class XI IPA 1-2 SMA Negeri 3 Pematang Siantar.

- e) Independent test
  - After The calculations were carried out and obtained Fcount = 0.15 and less than Ftable = 2.36, which means that the Y variable is independent of the X variable in a linear sense.
- f) The Regression Equation of Variable X and Variable Y is a Linear Model Based on the data obtained from the field contained in the appendix shows that: In variable X the Role of Multimedia in PAK Learning is developed 3 (Three indicators), namely being able to use Canva media positively which is discussed in table 4.3 (Appendix 4) shows the results2.36. this means being able to develop themselves positively, played by PAK students has a significant relationship withStudent Learning Creativity during the Covid-19 Pandemic in Class XI IPA 1-2 SMA Negeri 3 Pematang Siantar, so the hypothesis is accepted.
  - Submission of subject matter can be uniformed which discussed the significant relationship to Student Learning Creativity during the Covid-19 Pandemic in Class XI IPA 1-2 SMA Negeri 3 Pematang Siantarso the hypothesis is accepted.
  - 2. The learning process becomes clearer and more interesting discussed has a significant relationship to Student Learning Creativity during the Covid-19 Pandemic in Class XI IPA 1-2 SMA Negeri 3 Pematang Siantar, so the hypothesis is accepted.
  - 3. The learning process becomes more interactive discussed has a significant relationship to Student Learning Creativity during the Covid-19 Pandemic in Class XI IPA 1-2 SMA Negeri 3 Pematang Siantar, so the hypothesis is accepted.

From the research conducted thoroughly, it proves the acceptance of the hypothesis with different uses according to the research objectives.

## 4. CONCLUSION

The results showed that the role of multimedia in PAK learning had a very significant role in student learning creativity during the Covid-19 pandemic in Class XI IPA 1-2 SMA Negeri 3 Pematang Siantar. This can be seen from the calculation of the correlation coefficient, correlation significance test, determination test, simple linear regression test, independent test and regression linearity test.

The results of the research show that the role of Multimedia in PAK Learning has a positive effect on Student Creativity during the Covid-19 Pandemic in Class XI IPA 1-2 at SMA Negeri 3 Pematang Siantar, with various aspects carried out: Submission of subject matter can be uniformedpositive impact onStudent Learning Creativity during the Covid-19 Pandemic in Class XI IPA 1-2 SMA Negeri 3 Pematang Siantar. The learning process becomes clearer and more interestingpositive impact onStudent Learning Creativity during the Covid-19 Pandemic in Class XI IPA 1-2 SMA Negeri 3 Pematang Siantar. The learning process becomes more interactivepositive impact onStudent Learning Creativity during the Covid-19 Pandemic in Class XI IPA 1-2 SMA Negeri 3 Pematang Siantar.

## **ACKNOWLEDGMENTS**

The researchers would like to thank the Institute for Research and Community Service (LPPM) HKBP University Nommensen Medan for the financial assistance given to the researchers so that this research can be carried out properly in 2022.

#### REFERENCE

- [1] Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A., "Introduction to Research in Education". Wadsworth: Cengage Learning. 2010
- [2] Daryanto. "Panduan Proses Pembelajaran Kreatif dan Inovatif". Jakarta: AV Publisher. 2009.
- [3] Harjanto. "Perencanaan Pengajaran". Jakarta: PT Rineka Cipta. 2011.
- [4] Herman, H., & Pardede, H. "Deixis Analysis in the Business Article of the Jakarta Post". Wanastra: Jurnal Bahasa Dan Sastra, 12(2), 137–141. 2020.



## http://infor.seaninstitute.org/index.php

## JURNAL SCIENTIA, Volume 11 No 2, 2022

ISSN 2302-0059

- https://doi.org/10.31294/w.v12i2.8464
- Herman, Shara, A. M., Silalahi, T. F., Sherly, & Julyanthry. "Teachers' Attitude towards [5] Minimum Competency Assessment at Sultan Agung Senior High School in Pematangsiantar, Indonesia". Journal of Curriculum and Teaching, *11*(1), https://doi.org/10.5430/jct.v11n2p1
- [6] Industri, R., Pasca, D. A. N., Eliasaputra, M. P., Novalina, M., & Siahaan, R. J. "Tantangan Pendidikan Agama Kristen Di Era". BONAFIDE: Jurnal Teologi Dan Pendidikan Kristen, 1, 1-22. 2020
- [7] Kemdikbud. "Penyesuaian Kebijakan Pembelajaran di Masa Pandemi COVID-19". Www.Kemdikbud.Go.Id, 26. https://www.kemdikbud.go.id/main/blog/2020/08/kemendikbudterbitkan-kurikulum-darurat-pada-satuan-pendidikan-dalam-kondisi-khusus. 2020.
- Munthe, B., Herman, Arifin, A., Nugroho, B. S., & Fitriani, E. "Online Student Attendance [8] System Using Android". Journal of Physics: Conference Series, 1933(1). 2021. https://doi.org/10.1088/1742-6596/1933/1/012048
- [9] Munthe, Bangun, Simanungkalit, D. U., Hariania, H. M., Hutasoit, L. T., Sipahutar, M. S., & Simanjuntak, L. "Implementasi Media Pembelajaran terhadap Prestasi Belajar Siswa di SD Negeri 173349 Hutaginjang Kecamatan Muara-Tapanuli Utara". Jurna: Jurnal Program Mahasiswa Kreatif, 6(1), 195–2001. 2022.
- [10] Sudjana. "Metode Statistika". Tarsito. Bandung. 1986.
- Sudjana. "Metode Statistika". Tarsito. Bandung. 2005. [11]
- [12] Sumarni, S. "Metodologi Penelitian Pendidikan". Yogyakarta: Insan Madani. 2012.
- Sugiyono. "Metode Penelitian Kuantitatif dan Kualitatif". Bandung. Alfabeta. 2009 [13]
- [14] Sugiyono. "Metode Penelitian Kualitatif dan R & D". Bandung: IKPI. 2010.
- [15] van Thao, N., Herman, Napitupulu, E. R., Hien, N. T., & Pardede, H. "Code-switching in learning via zoom application: A study in an EFL context". Asian ESP Journal, 17(3), 91–111. 2021.