

Lecturer Creativity in the Use of Online Learning Media at Manado State University

Romi Mesra¹, Muhammad Fajar Hidayat², Veronike E. T Salem³, Tasente Tanase⁴

^{1,3}Sociology Education, Manado State University, Indonesia

²Teacher Education Madrasah Ibtidaiyah, IAIN Ambon, Indonesia

⁴Faculty of Law and Administrative Sciences, Ovidius University of Constanţa, Romania romimesra@unima.ac.id¹, mfajarhidayat@gmail.com², veronikesalem@unima.ac.id³,

tanase.tasente@365.univ-ovidius.ro4

ABSTRACT

Keywords:

Lecturer creativity;
Online learning media;
Manado State
University.

Lecturers and students conduct lectures online through online applications such as google meet, zoom meeting, google classroom, and other online learning applications. In addition to using online applications, a lecturer of course also needs to develop his creativity by using these online learning applications coupled with creativity in combining them with other online means such as social media. This research is different from previous research where this research specifically wants to see and describe how the creativity of lecturers in using online learning media will determine the process and results of achieving certain subjects. The method used in this study is a qualitative research method where the researcher does not use data in the form of numbers but rather data in the form of stories. Methods of data collection using observation and interviews to lecturers at Manado State University. Data analysis uses data analysis from Miles and Huberman, interactive nature of data collection with data analysis, data reduction, data presentation, and drawing conclusions. The results of the research are as follows: (1) combining the unima learning management system with the zoom meeting application; (2) using youtube media and zoom meetings; (3) combining google class rooms with the google meet application; (4) the main media for the zoom meeting application being used with instagram and WhatsApp groups; and (5) using the zoom meeting application with the tiktok application. The conclusion means that basically the lecturers at Manado State University have been able to use online learning media creatively and apply them in the learning process.



Article History:

Received: 16-09-2022 Revised: 11-10-2022 Accepted: 23-10-2022 Online: 01-12-2022 © 0 0 EY 5A

This is an open access article under the CC-BY-SA license



 $\underline{https://doi.org/10.31764/ijeca.v5i3.11045}$

A. INTRODUCTION

At first, learning in higher education ran normally where it could be done face-to-face without being limited by various rules that required the campus community to have a certain distance from one another and was only regulated based on existing values and norms as well as other normal rules. Lecturers and students can come to campus at any time to conduct lectures or other academic activities. The campus community can also gather in any location that is allowed to

gather and with any number of people, there are no special restrictions on this (Aylward & Liang, 2020).

Then at the end of 2019, news began to hear about the outbreak of a very deadly virus whose impact was starting to show its impact in Wuhan China, precisely in an extreme market in Wuhan. Indonesian people have even started to get a lot of this information from social media and other media and there are even videos showing the condition of people affected by this virus through video shows on social media. we can see people who fall while standing like in a zombie movie because of this virus although it is still doubtful that it is the original video of the condition of people who have contracted this virus (Feng & Savani, 2020).

The World Health Organization (WHO) as a world health organization after going through several studies and making an agreement to name the virus with the name Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) and give a name to the disease from the virus with the name Coronavirus Disease (COVID-19) (WHO, 2020). At first it was not possible to conclude whether this disease could be transmitted between humans or not or whether it could be transmitted through other media. Over time, it turned out that the spread of this virus was very significant and so did the people who were infected not only in Wuhan but also the spread had reached outside of Wuhan until it was finally confirmed that the transmission of this pneumonia could be transmitted from human to human (World Health Organization, 2019).

In Indonesia itself, this virus began to enter around the beginning of 2020, at first the Indonesian people did not seem too bothered by this virus and thought it might be the same as bird flu and the previous viral phenomenon which would disappear by itself and would not have a long impact on the lives of Indonesian people, let alone the world. . People are doing business as usual and the government has not issued any special appeals or regulations regarding this virus. However, as many cases began to appear in Indonesia and were even found in various regions in Indonesia, the government began to give appeals and regulations regarding the prevention of the spread of this virus (Irwan et al., 2022).

Various actions and policies were taken by the government to be able to break the chain of the spread of this virus. Starting from socialization efforts, implementing social distancing to enacting laws as the legal basis for prosecution. There are still many people who are confused by the emergence of this corona virus pandemic, especially when this epidemic has an influence and has an impact on the economic sector until the Government issues various policies to save the people's economy in order to maintain economic stability both on a micro and macro scale (Syauqi, 2020).

With regard to activities at universities, people in the environment such as students, lecturers, employees, parents, traders, and other communities around the campus feel firsthand how the impact of the Covid-19 pandemic has on activities on the campus itself. . During the pandemic, face-to-face learning is very difficult to do, even according to government directives, face-to-face learning is replaced with online learning, even though this is in certain conditions also adapted to the conditions of the spread of the COVID-19 virus in certain areas so that the lecture policy also adjusts (Mesra et al., 2021).

The Covid-19 pandemic has brought so many changes, especially in the academic world, educators and students must be faced with new patterns in online learning that were previously not too familiar to them because they are used to face-to-face learning. Various aspects that have changed in the world of education, even to the specifics of the learning materials and media used, must be adapted to online learning media such as the use of zoom meeting applications, power points, learning management systems, and so on (Sandu et al., 2021).

The condition of lectures at Manado State University also adjusts to government directives where there are no more face-to-face or offline meetings so that lecturers and students conduct lectures online through online applications such as google meet, zoom meeting, google classroom, and other online learning applications. In addition to using online applications, a lecturer of course also needs to develop his creativity by using these online learning applications coupled with creativity in combining them with other online means such as social media in order to increase student learning enthusiasm and of course also to increase the achievement of the course objectives themselves. Basically, online learning has also experienced dynamics during its implementation in these few semesters, as explained by the various problems of online learning above, there are students who can access online learning well and some who cannot because of the different conditions of each student. So in the various problems of online learning, inevitably a lecturer must take a bigger and more creative role so that learning objectives can still be achieved properly.

The discussion that is relevant to this research is an article from Heejeon Suh, Four collaborative learning scenarios were proposed, which were: (1) project based collaborative learning using presentation and communication tools; (2) story based collaborative learning using a role-playing game; (3) collaborative play using interactive rugs; and (4) Inquiry based collaborative learning using an immersive display (Suh, 2011).

Then also relevant to the article These findings shed light on the possible ramifications of the COVID-19 aftermath. Many universities around the world jumped from relatively low levels of online instruction in the beginning of spring 2020 to nearly 100% by mandate by the end of the spring term. The question becomes, what will happen after the mandate is removed? Will demand resume pre-crisis levels, will it increase modestly, or will it skyrocket? Time will be the best judge, but the findings here would suggest that the ability/interest of instructors and institutions to "rise to the occasion" with quality teaching will have as much effect on demand as students becoming more acclimated to online learning (Van Wart et al., 2020).

Further relevant to the article from Mesra (2022) the results of this study are; Basically, online learning certainly has a positive side and a negative side. For example, the positive side of online learning for an educator is the challenge in carrying out online learning, of course also accompanied by the challenge of mastering various media and online learning applications. For students online learning has a positive side where in general students are close to information technology so that they are not too difficult to adapt to online learning. However, the negative side is that students must be able to control themselves from addiction to using gadgets and social media and other online applications so that they do not interfere with the online learning process they are participating in.

This research is different from previous research where this research specifically wants to see and describe how the creativity of lecturers in using online learning media will determine the process and results of achieving certain subjects. The purpose of this study is to reveal and describe how the creativity of the lecturers at Manado State University in dealing with learning situations that must be done online but the learning objectives and the process must still be achieved properly.

B. METHODS

The method used in this study is a qualitative research method where the researcher does not use data in the form of numbers but rather data in the form of stories, information from informants, and other qualitative data where the research instrument is the researcher himself (Zohrabi, 2013).

Research Methodology Flow Chart

This research was carried out with various systematic work steps so as to obtain optimal results. The steps of research work are a series of procedures and steps in conducting structured research in a systematic and directed manner so that the objectives of the research can be achieved properly. The steps used in this study are seen in the following research, as shown in Figure 1.

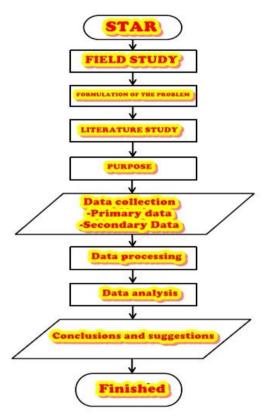


Figure 1. The steps used in the research

Explanation of Research Methodology Flowchart

a. Field Study

Is one way to obtain data by making direct observations of the object to be studied to obtain information about the problem. The choice of research location is very important because there are several considerations which will affect the sample to be taken and can represent the entire sample. The selection of locations based on several criteria is also intended to make the research more targeted so that it can describe what the objectives of this research are.

b. Formulation of the problem

A problem is a perceived difficulty, concrete, and requires a solution. Problems can also be interpreted as a gap between expectations (das sollen) and reality (das sein). A problem

254 | IJECA (International Journal of Education and Curriculum Application)

Vol. 5, No. 3, December 2022, pp. 250-261

does not have to demand / cause a research but research is carried out because there is a problem. A person who is going to do the research must first determine what the problem is (Kerlinger, 2004). The formulation of the problem in this study are: 1. How is Lecturer creativity in the use of online learning media at Manado State University?, 2. What is the form of Lecturer creativity in the use of online learning media at Manado State University?

c. Literature Study

One assumption made in this study is that sources used in literature review are an indicator of the quality of paper being evaluated. Literature reviews use a combination of primary, secondary and tertiary sources to document and analyse what has been published on any given topic through time. Academic research is based on primary sources whereas literature review is based on secondary sources. Ideally a researcher uses tertiary sources to develop a general concept of the topic, then consults secondary sources to see what has been already written on the topic, at different times and from different points of view, by other scholars (review of the literature). Then, the researcher, being guided by review of what already exists, consults primary sources to develop his/her own view of the topic. Tertiary sources are rarely used in academic writing because they only provide general and simplified background to the topic (Young, 2017).

d. Purpose

The research objectives are the discovery, verification and development of science. Discovery is data obtained from research is new data that has never been known. Evidence is data obtained from research used to prove the existence of doubts about certain information or knowledge. Development is data obtained from research used to deepen and expand existing knowledge. Literatur study of this research are: 1. To uncover how is Lecturer creativity in the use of online learning media at Manado State University!, 2. To know what is the form of Lecturer creativity in the use of online learning media at Manado State University!

e. Data Collection

Methods of data collection using observation and interviews. Unstructured interviews are usually very time-consuming (often lasting several hours) and can be difficult to manage, and to participate in, as the lack of predetermined interview questions provides little guidance on what to talk about (which many participants find confusing and unhelpful). Their use is, therefore, generally only considered where significant 'depth' is required, or where virtually nothing is known about the subject area (or a different perspective of a known subject area is required) (Gill et al., 2008). The informants of this study consisted of 20 lecturers from several departments at Manado State University.

Observation uses semi-involved observation where the researcher becomes part of the informant's environment and becomes part of the informant's routine at certain times but is not fully involved where the researcher sees a series of behaviors and identifies independently the consequences and background of the emergence of these behaviors. Conduct semi-structured interviews to follow up and clarify findings from observations (include questions about medical jargon, differences in procedure amongst team leaders etc (Bryant, 2006). Researchers make observations half-involved in research by being part of the lecturers who teach at Manado State University who then also pays attention to or observes the creativity and ways of other lecturers in carrying out learning, including

researchers making appointments with the lecturers concerned if necessary to make observations.

f. Data Processing

Data processing is a very important part of the scientific method, because with data processing, the data can be given meaning and meaning that is useful in solving research problems. The raw data that has been collected needs to be broken down into groups, categorised, manipulated and squeezed in such a way that the data has meaning to answer problems and is useful for testing hypotheses or research questions. Manipulating raw data means changing the raw data from its initial form into a form that can easily show the relationships between phenomena. Several levels of activities need to be carried out, including checking the raw data, again, making it in the form of a useful table, either manually or by using a computer. Operations in data processing: editing, coding, classification, and tabulation (Arts, 2022).

g. Data analysis

Data analysis using data analysis from Miles and Huberman, interactive nature of data collection with data analysis, data reduction, data presentation, conclusion drawing/verification is an integral part of data analysis activities. Data reduction is an attempt to conclude the data, then sort the data into certain concepts, certain categories, and certain themes. The results of data reduction are processed in such a way that the image looks more complete. It can be in the form of sketches, synopsis, matrices, and other forms. This is very necessary to facilitate the presentation and affirmation of conclusions (Miles & A. Huberman, 1994).

h. Conclusions and recommendations

At the end of a research, at the end there are always conclusions and suggestions. these two things were done after the researchers conducted analysis and interpretation, then the researchers made general conclusions (generalizations) based on the existing research boundaries and in accordance with the proposed hypothesis. In addition, it is also necessary to provide suggestions, because research usually has limitations or assumptions. if the research conducted is applied research, then there may be suggestions that need to be considered by the executor of the research results so that the research results can be applied. if the research is a basic research that aims for theoretical purposes, it is recommended that researchers use other assumptions so that scientific law applies in general.

C. RESULT AND DISCUSSION

After conducting research with a certain time using interview and observation data collection techniques, the researchers obtained research results related to how the creativity of lecturers in using online learning media at Manado State University, as follows:

Combining Unima Learning Management System with Zoom Meeting Application

Learning activities at Manado State University during the Covid-19 pandemic were carried out online, in this case the campus has prepared an online learning application to facilitate lecturers and students to carry out a learning process called the Unima LMS (Learning Management System). To maximize this service, the campus even makes workshops because this media is a very new learning medium, especially for lecturers and students. Many of the features in this media that users do not know how to use, besides the workshop, a manual is also provided so that it can be used as a reference in the use of this media, then tutorials are also provided on

Youtube by the Unima LMS manager so that users are more helpful in using this media. As stated by one of the SF lecturers (31 Years) as follows,

"...indeed we have to take part in a lot of socialization and training so that the book of Isa carries out lectures using this LMS, this is a new thing for us as lecturers, we must be able to teach students first" (Interview on August 15, 2022).

In its application, this LMS sometimes has a busy server or is interrupted so that it cannot be accessed by users so that lecturers and students find it difficult to carry out lectures in a stable and sustainable manner. To overcome this, many lecturers also use other media as companion media, one of which is using the Zoom Meeting application. This zoom meeting application also has limitations, especially for the free version where we can only do video zoom meetings for 40 minutes, while lectures that are carried out for 2 credits only take 100 minutes so that when the session runs out, new sessions must be made several times to complete the session. one course meeting.

In addition to containing the main material, namely optical devices, the LMS software is also equipped with instructions for use, competencies achieved, practice questions, online assignment questions, supporting enrichment materials, links to related learning resources and discussion forums. LMS software can also be accessed repeatedly and provides a new experience for students (Kraleva et al., 2019).

Although among the many advantages and disadvantages of combining the use of the Unima LMS with the Zoom meeting application, it is very necessary where to see virtual lectures it is very helpful to use the Zoom meeting application but for collecting assignments, then attendance, giving material files according to RPS and others it is difficult using the zoom meeting application and was greatly helped by the presence of the Unima LMS. Its use is also quite flexible between these 2 media, when the LMS server is good then its use can be maximized with the LMS but when the server has problems or maybe also to hold learning variations to avoid boredom and so that students are also more motivated in learning, the zoom meeting application can be used. As expressed by one JS student (20 years) as follows,

"... we had a bit of trouble using this LMS, but sometimes we forgot our username or password so we couldn't log in to the LMS and the server often had problems. Accompanied by the zoom meeting application, this can be a solution so that learning runs more smoothly when the LMS has problems and is also more enthusiastic because it can meet classmates virtually in the zoom meeting application" (Interview on August 20, 2022).

Based on what JS said, it can be seen that the combination of LMS and the zoom meeting application is very helpful, especially for students both in terms of better accessing lectures and can also increase student enthusiasm in the teaching and learning process because through the zoom meeting application, it is certainly more relevant to meetings. face-to-face even though it is done virtually, you can still see lecturers and other students directly.

2. Using Youtube Media and Zoom Meeting

In online learning, the creativity of a lecturer in using online learning media will greatly help the achievement of lecture goals and especially as a variation of learning so that students are not bored and continue to be motivated in attending lectures. Online learning can be fun or otherwise very boring, this will certainly be influenced by many things, one of which is the learning method applied by the teacher in the online teaching and learning process. The challenge is that teachers do have to work and think hard to find methods that are suitable to be applied in online learning

because students of course also have their own obstacles so that when teachers have implemented interesting learning methods, it is possible that students will also be more interested in learning even though this is also the case. cannot be ascertained. What's more, if the method used by the teacher is very boring, it is very difficult to encourage students to be active in the teaching and learning process (Mesra et al., 2022). Thus, as done by several lecturers at Manado State University where they use youtube learning media to add learning variations so that students are more motivated in learning. As stated by AH (33 Years) as follows,

"...I have been active on youtube from the start, then during this online learning I also thought that this youtube media could be used as one of these online learning media so that later I applied it in my courses where there are usually lecture directions and lecture materials what I convey through youtube media as well as for student assignments are also carried out through youtube media" (Interview on August 25, 2022).

For some students who are a bit unfamiliar with youtube, they may feel a little awkward at first when the lecturer uses youtube media in learning. But as time goes by, students learn slowly, including starting by creating a gmail account and then creating a youtube account to be able to enter lecture assignments from the lecturer to the student's personal youtube. Usually the lecturer will ask for a student assignment link that is on youtube so that a lecturer can see the results of student assignments and provide an assessment.

In addition to using this YouTube media, the lecturers will actually use the Zoom meeting application a lot, especially at the first meeting when explaining the lecture contract. In these activities, lecturers usually share power point or word screens and some do not share screens where a lecturer explains directly about the information needed about the course and also to make certain agreements with students related to the course. In one semester meeting. As stated by one of the HM lecturers (31 years) as follows,

"...YouTube media is basically a modern media that can be tried as a learning medium, but as in my experience, students still need face-to-face meetings even though they are virtual with their lecturers directly, especially with their friends, so I also use the main media, the zoom meeting application." (Interview on August 25, 2022).

3. Combining Google Class Room with Google Meet Application

In the early days of online learning at Manado State University before the existence of LMS and the proliferation of other online learning applications, generally lecturers used the Google Classroom application as a learning medium. This application is quite simple to use and to be studied both by lecturers and by students themselves. This application is very easy to create an account both as a teacher and as a student or student, for those who have difficulty, it is enough to see the tutorial on google or on youtube and there are so many references.

Google Classroom is very simple to create and to use. Here all available features are integrated. Once a new course space is created, the instructor can see three taps. These are labeled as about, students and stream. In the same page, on the bottom of the right side, he or she can see a plus sign. If the instructor clicks on it, four different tabs will open named reuse post, create question, create assignment and create announcement. A teacher can keep all files save in the Google Drive. He or she can grade, attach you tube or any link for instructional purpose. From Google Classroom, a teacher can send mail to all students at a time (Graham & Borgen, 2018). As expressed by a WZ student (20 Years) as follows,

"... if learning through google classroom is quite easy to learn and follow, man, if there are steps that we don't understand, we usually just ask the lecturer and are directed to make it easier to follow so that we can follow online learning well" (Interview on 25 August 2022).

In addition to using google classroom, it also needs to be combined with media that allows lecturers and students to meet virtually, so that lecturers can directly evaluate students, provide affective assessments of student behavior when learning online through the google meet application. The Google Meet app offers a feature that allows teachers as participants to share screens. In other words, it can turn the main screen into the files needed for learning. Teachers can present PowerPoint. Students and teachers can also share videos they want to see, and students can listen to videos shared by teachers via google meet. Usually learning in the classroom with teaching aids, such as PowerPoint slides by the teacher. This will allow students to better understand the material presented. Of course this is very useful for teachers and students (Hutagaol et al., 2021).

Just as it is applied to students in the school environment, the Google Meet application learning media is also very relevant if it is applied in the campus world by a lecturer in the implementation of the learning process in the courses he teaches. The google meet application can cover learning deficiencies by using google classroom which cannot display virtual videos live or directly so that interactions between students and between educators and students can be seen. As expressed by one of the IR lecturers (34 years) as follows,

"...The advantage of this google meet is that the duration of its use for free can be hours, it can cover hours in one meeting which is usually 2 to 3 credits in one meeting" (Interview on 1 September 2022).

4. The main media for the Zoom Meeting application is used with Instagram and WhatsApp groups

One of the most popular applications in online learning is the Zoom Meeting application where this application is basically very easy to use by lecturers and students. However, in the teaching and learning process on campus, there are so many courses and so many meetings, usually 16 meetings in one semester are not enough, it is not possible to continuously use the Zoom meeting application. Zoom has many benefits in its use in the midst of the covid-19 pandemic. However, by using zoom, teachers and educators can also do other activities because the learning provided is quite effective because it can be done anywhere and anytime (Hazairin & Melati, 2020).

To compensate for the use of the zoom meeting application, which cannot be used as the only medium of learning, some lecturers also use other applications that are also current, such as the use of Instagram and WhatsApp groups. Instagram, which incidentally is an application that can be used to share photos and videos, will be very relevant to be used in learning, for example as a learning resource or as a medium for assigning and evaluating students in certain courses. Likewise with the WhatsApp application where this application is very widely used by lecturers to form subject groups or form discussion groups as well as for students this WhatsApp application can be used to form class groups, subject groups, study groups, and so on as messengers, and share lecture files. As expressed by one of the PS lecturers (32 years) as follows,

"... At first I only used the Zoom Meeting application for lectures in my courses, but I saw that the students were a bit bored. Then I thought maybe they should use the media they use every day, so I used Instagram for student assignments and created a course group on Instagram so that

sharing information and sharing lecture files was easier" (Interview on September 13, 2022). Basically, every difficulty or obstacle faced by lecturers during learning during the COVID-19 pandemic can also be used as learning to get better solutions and stimulate lecturers' creativity in determining learning media that attract students to be more active and fun in learning.

Using the Zoom Meeting app with the Tiktok App

As the Covid-19 pandemic continues, social media is also growing, as is TikTok, which is very popular with people of all ages. In addition to entertainment media and earning income, tiktok media if it is in the hands of creative lecturers can also be used as a learning medium because not all tiktok content contains dances or negative things, but there is a lot of content that is also relevant to certain subjects, and can be used as a source of lecture material or assignment references for students. The application that we know as tiktok is of course very familiar in various circles, not only as spectators, but even many users and as content creators on tiktok itself. When viewed from the various variations of content on TikTok, some content is certainly very relevant to be used as learning material or this TikTok media is very suitable as a medium of expression and creativity by students.

The use of the zoom meeting application can of course be said to be mainstream in the academic environment or lecture environment because this application is the application that is most widely used by lecturers and students since the beginning of the emergence of the COVID-19 pandemic and the implementation of online learning in universities. However, applications such as TikTok, although not an application that incidentally is a learning application, of course the varied content in it can be used as a source of learning in certain fields of science or subjects. As expressed by an MD lecturer (34 years) as follows,

"... as a book lecturer, we must be able to control the classroom situation and see how the students' conditions and interests are in our class. Of course, the book of Jesus knows whether students are bored with the methods or media we use, if so, of course we must have creativity even though it is not mainstream, for example by using the tiktok application as a learning resource" (Interview on September 14, 2022).

D. CONCLUSION AND SUGGESTIONS

Based on the results of interviews and observations of researchers about how the creativity of Manado State University lecturers in using learning media, the researchers can draw the conclusion that a lecturer is very likely to elaborate on the learning situation in the courses he teaches related to the use of learning media, he does not always have to use learning media that have been developed, commonly used but can also use new learning media that may not be used by many people. Furthermore, lecturers also do not have to be fixated on one learning media but can also be combined with several learning media or use applications that are close to students as learning media. Based on the results of this study, the combination of learning media can be done as follows: (1) Combining Unima's learning management system with the Zoom meeting application; (2) Using YouTube and Zoom meeting media; (3) Combining Google class room with the Google Meet application; (4) The main media for the Zoom application meeting is used with instagram and whatsapp group; (5) Using the zoom meeting application with the tiktok application.

Suggestions for the next writer or researcher might be to examine specifically the combination of social media that is most suitable to be applied to online learning. Then maybe it can be revealed that more anti-mainstream media or applications that can be used for online

learning are of course media and tools that are closer to students or students so that they are more relevant to them and may attract more interest in them to be more motivated in carrying out learning activities.

ACKNOWLEDGEMENT

I am especially grateful to my family who have supported me during the writing of this article even though I am currently far from them in Padang City and I have to serve in Manado alone but am still grateful because life must also be fought for. Then I am also very grateful to all my fellow writers who have been very helpful, especially to Mr. Tasente Tanase from Ovidius University of Constanta where this is the first time I can collaborate with writers from abroad. As well as to other fellow writers, Mr. Muhammad Fajar Hidayat and Mrs. Veronike E. T Salem. Hopefully this article can contribute to the development of science, especially those related to the educational disciplines of sociology, social science and other sciences and be useful for academics, researchers, and people who pay attention to the topics in this article. Thank you!

REFERENCES

- Arts, P. (2022). Chapter 3 Methods of Data Collection and Processing and Analysis of Data Operations in Data Processing. Dr. D. Y. Patil Arts, Commerce & Science College. https://acs.dypvp.edu.in
- Aylward, B., & Liang, W. (2020). Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19). *The WHO-China Joint Mission on Coronavirus Disease 2019*, 2019 (February), 16–24. https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf
- Bryant, M. (2006). Conducting observational research. *Research Methods in Health Promotion*, 107–128.
- Feng, Z., & Savani, K. (2020). Covid-19 created a gender gap in perceived work productivity and job satisfaction: implications for dual-career parents working from home. *Gender in Management*. https://doi.org/10.1108/GM-07-2020-0202
- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: Interviews and focus groups. *British Dental Journal*, *204*(6), 291–295. https://doi.org/10.1038/bdj.2008.192
- Graham, M. J., & Borgen, J. (2018). Google Classroom. *Google Tools Meets Middle School*, *3*, 23–36. https://doi.org/10.4135/9781506360188.n3
- Hazairin, & Melati. (2020). The Use of Zoom Cloud Meeting as an Innovative English Learning Media. *International Conference on The Teaching of English and Literature*, 1(1), 249–256.
- Hutagaol, E. N., Yuliana, S., Irawan, S., & Rosmawaty. (2021). Pemanfaatan Aplikasi Google Sebagai Media. *Prosiding Seminar Nasional PBSI-IV*, 387–392.
- Irwan, I., Mesra, R., Hamsah, H., Kuswanti, A., Febriani, E. A., Zusmelia, Z., & Siska, F. (2022). Life Survival, Social Network, and Social Capita Matrilineal of Minangkabau Women Street Vendors during Covid-19 Pandemic in West Sumatera. *Jurnal Ilmu Sosial Dan Humaniora*, 11(1), 126–135. https://doi.org/10.23887/jish.v11i1.40238
- Kerlinger, F. . (2004). Asas-Asas Penelitrian Behavioral. Gadjah Mada.
- Kraleva, R., Sabani, M., & Kralev, V. (2019). An analysis of some learning management systems. *International Journal on Advanced Science, Engineering and Information Technology*, *9*(4), 1190–1198. https://doi.org/10.18517/ijaseit.9.4.9437
- Mesra, R. (2022). The Effect of Online-Based Learning Media on Social Studies Subjects at Sma Negeri 2 Tondano Online-Based Learning Media on Social Studies Subjects Online-Based Learning Media on Social Studies Subjects. *Jurnal Ilmiah Mandala Education*, 8(3), 2124–2133. https://doi.org/10.36312/jime.v8i2.362

- Mesra, R., Hasrin, A., Fathimah, S., Rahman, R., & Putri, S. (2021). The Phenomenon of Student Life Who is Studying While Working in the City of Padang. International Joined Conference on Social Science (ICSS 2021), 603(Icss), 319-325.
- Mesra, R., Mononege, N., & Korah, Y. C. (2022). The Effectiveness of Online And Offline Learning (Hybrid Learning) For Students At Sma Negeri 1 Tondano. 8(3), 2287-2294. https://doi.org/10.36312/jime.v8i2.3710/http
- Miles, M. B., & A. Huberman, M. (1994). Matthew B. Miles, Michael Huberman Qualitative Data Analysis An expanded Sourcebook 2nd Edition (1994).pdf (p. 338).
- Sandu, M. L., Rus, M., Sălceanu, C., & Tasente, T. (2021). Student perception of online education supported in the Covid-19 period. Technium Social Sciences Journal, 15(January), 71–79. https://doi.org/10.47577/tssj.v13i1.947
- Suh, H. (2011). Collaborative Learning Models and Support Technologies in the Future Classroom. International Journal, 5(1), 50-61. http://jaems.jp/contents/icomej/vol5/IJEMT5.50-61.pdf
- Syauqi, A. (2020). Jalan Panjang COVID19 (sebuah refleksi dikala wabah merajalela berdampak pada perekonomian). *JKUBS: Journal of Chemical Information and Modeling*, 1(1), 1–19.
- Van Wart, M., Ni, A., Medina, P., Canelon, J., Kordrostami, M., Zhang, J., & Liu, Y. (2020). Integrating students' perspectives about online learning: a hierarchy of factors. International Journal of Educational Technology in Higher Education, 17(1). https://doi.org/10.1186/s41239-020-00229-8
- World Health Organization. (2019). Coronavirus Disease (Covid-19) Outbreak: Rights, Roles and Responsibilities of Health Workers, Including Key Considerations for Occupational Safety. (WHO), World Health Organization 1-3. https://www.who.int/docs/defaultsource/coronaviruse/who-rights-roles-respon-hw-covid-19.pdf?sfvrsn=bcabd401_0
- Young, M. (2017). Quality of literature review and discussion of findings in selected papers on integration of ICT in teaching, role of mentors, and teaching science through science, technology, engineering, and mathematics (STEM). Educational Research and Reviews, 12(4), 189–201. https://doi.org/10.5897/err2016.3088
- Zohrabi, M. (2013). Mixed Method Research: Instruments, Validity, Reliability and Reporting Findings. Theory and Practice in Language Studies, 3(2), 254–262.