



Online Teaching - Learning During the Pandemic Coronavirus Disease (Covid-19) Case Study: STMIK Rosma

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Abstract. At the end of 2019, the world community was shocked by the outbreak of a new virus, namely the coronavirus disease. In Indonesia itself, various efforts have been made to prevent the spread of the virus, including by implementing Large-Scale Social Restrictions or PSBB. The implementation has an impact on several sectors, including education. Learning that was initially carried out face-to-face has been replaced with online learning. STMIK Rosma, as one of the tertiary institutions, applies online learning or online teaching-learning. By using various tools and methods, it turns out that running online teaching-learning has various obstacles. This study aims to determine how online teaching-learning was during the COVID-19 pandemic and identify the online teaching-learning platform often used and considered the best during the Covid-19 pandemic. This study uses qualitative and quantitative methods (mixed methods) with qualitative grounded theory and quantitative percentages. The analysis results show that the perception of the resource persons about online learning at STMIK Rosma is quite good, and the online learning platforms used and considered the best are Moodle, Google Meet, and YouTube. The results of this study are expected to help STMIK Rosma improve online learning in the future.

Keywords: Covid-19 · Online Teaching-Learning · Grounded Theory

1 Introduction

At the end of 2019, the world was shocked by the emergence of a new virus known as the Covid-19 Virus. Accordingly, it was referred to by The World Health Organization (WHO) as the novel coronavirus 2019 (2019-nCoV) caused by the Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) virus [1]. Indonesia first reported two positive cases of COVID-19 on March 2, 2020 [2]. CoronaVirus Disease (COVID-19) has also been declared by WHO a pandemic, and the Government of Indonesia, based on Presidential Decree No. 11 of 2020 concerning the Determination of Public Health Emergency CoronaVirus Disease (COVID-19), has declared a public health emergency that must be taken care of [3]. One of Indonesia's efforts in countermeasures is implementing Large-Scale Social Restrictions (PSBB). PSBB consists of restrictions on certain activities for those in a high-risk transmission area to prevent transmission. PSBB regulates

school and workplace holidays, religious activity; activities in public places or facilities; social and cultural activities; modes of transportation, and restrictions on other activities related explicitly to defense and security aspects [4]. This policy makes teaching and learning activities in the face-to-face context temporarily suspended. The government replaces learning with an online learning system through existing online learning applications. With this policy, online learning, which was previously not optimally implemented, becomes the only choice form of learning [5].

Online learning is a learning system that is not done face-to-face. Instead, it uses a platform that can help the teaching and learning process that is carried out even though it is distanced [6]. The implementation of online learning requires the support of mobile devices that can be used to access information anytime, anywhere, such as smartphones, tablets, and laptops [7]. The media used for online learning is E-Learning Platforms such as Moodle [8] and Google Classroom [9]. In addition, various media conferences are also used to support online learning, such as Zoom Meetings [10, 11], Google Meet [12, 13] even take advantage of social media such as WhatsApp, Facebook, YouTube and Instagram [14–17].

Like other universities affected by COVID-19, STMIK Rosma has also changed the lecture system from face-to-face to online lectures. Currently, online learning at STMIK Rosma uses several online learning media, in which each tool has its advantages and disadvantages.

Encountering the current learning conditions attracted the interest of researchers to analyze the online teaching-learning currently running at STMIK Rosma. This study aims to determine the Online Teaching-Learning running at STMIK Rosma during the Covid-19 pandemic and which online teaching-learning method was most widely used and rated best during the Covid-19 pandemic. This study uses a combination of grounded theory and quantitative percentages by collecting data using interview methods and distributing questionnaires.

Grounded theory is research that will eventually form a theory based on systematically collected and analyzed data. Therefore, the grounded theory does not start with the initial theory [18]. The difference between grounded theory research methods and other research methods, in particular, is in the philosophical approach to theory development, which suggests a continuous relationship between data collection and data analysis [19].

Previous research conducted to find out about online teaching-learning method during the covid-19 pandemic used quantitative methods [20–22]. In addition, some studies use only qualitative methods [23, 24]. Meanwhile, research that combines quantitative and qualitative methods [25, 26] does not use grounded theory as a qualitative approach.

This study focuses on the perceptions of STMIK Rosma students and lecturers in carrying out online teaching-learning during the Covid-19 pandemic. The qualitative research in this study did not measure the difference in perception between practical and theoretical courses. Moreover, the results of qualitative research can be used as ideas to be explored more deeply with quantitative research. Moreover, the results of this research are also expected to improve the quality of online learning so that complete learning is achieved and helps STMIK Rosma in the future in improving online learning.

2 Research Methods

The research method used is combined (mixed methods) quantitative and qualitative research methods. According to Johnson, Onwuegbuzie & Turner (2007: 129), mixed methods research is an intellectual and practical synthesis based on qualitative and quantitative research [27]. For qualitative research using the grounded theory method approach. The grounded theory research approach is a qualitative research design that allows researchers to construct and build theories from data directly collected by researchers, not existing theories. The data collection method used in this study was by distributing questionnaires via google form and interviews with 85 respondents consisting of students and lecturers of STMIK Rosma. Interviews were conducted first before the questionnaires were distributed. These interviews aim to prevent bias in the data generated from the interviews. Qualitative data processing is carried out in three stages: open coding, axial coding, and Selective coding [28]. While quantitative data processing uses the following formula [29]:

$$\% = \frac{n}{N} \times 100$$

n: Values obtained

N: Total value

3 Result and Discussion

3.1 Respondents

Table 1 describes the demographic of the respondent in this study. It can be seen that the respondents used in this study were mostly men, namely 46 people or 54%. At the same time, the female respondents were 39 people or 46%.

According to respondents' age, this study involves mainly respondents aging 20 to 30 years, as many as 59 people or 69%. Then respondents under the age of 20 amounted to 12 people or 15%. While respondents with ages from 31 to 40 years amounted to 7 people or 8%, the last respondents with ages above 40 years were seven people or 7%, as shown in Table 2.

Based on Table 3, it can be seen that the respondents used in this study were dominated by students, as many as 73 people or 86%, while for lecturer respondents, there were 12 people or 14%.

Table 1. Table of Respondents by Gender

Gender	Total	Percentage
Man	46	54%
Woman	39	46%
Total	85	100%

Table 2. Table of Respondents by Age

Age Level	Total	Percentage
<20 years	12	15%
20–30 years	59	69%
31–40 years	7	8%
>40 years	7	8%
Total	85	100

Table 3. Table of Respondents by Occupation

Type of work	Total	Percentage
Lecturer	12	14%
College student	73	86%
Total	85	100%

3.2 Qualitative Data Processing

3.2.1 Open Coding

Open coding is a process of detailing, testing, comparing, conceptualizing, and categorizing data [28]. Table 4 is the open coding of the researcher's interviews with the respondents of this study.

3.2.2 Axial Coding

Axial coding is a set of procedures in which data is collected back together in a new way after open coding by making links between categories. This is done by utilizing the coding paradigm [28]. The results of the axial coding of the categories that have been obtained after open coding can be seen in Table 5.

3.2.3 Selective Coding

Selective coding is selecting core categories, systematically linking them to other categories, validating these relationships, and putting them into categories that are needed further for improvement and development [28]. Selective coding results from this research can be seen in Fig. 1.

Table 4. Respondent Interview Open Coding

Labels or data on transcript	Category
<ul style="list-style-type: none"> • Material is uploaded via e-learning • Google meets live • Google meet on record uploaded to • e-learning 	Online learning process
<ul style="list-style-type: none"> • Goes well • It is a good start • Must be evaluated first • Does not matter • Not too difficult • No problems • It is running normally • Very profitable • Already accommodated • Pretty good • Less effective • Feel so lightened up • Very helpful • Efficient • Already well 	Perception of Online Learning
<ul style="list-style-type: none"> • Students cannot show errors during practice. • Disconnected Connection • Bad internet network • Quota • Limited Interaction • Weather • Power failure • Place factor • Cannot control students • Unable to detect whether the student is there or not • The device is minimal • Location of recording material video does not support • Students do not have a great desire to learn. • Students are not conducive. • Many still do not understand the use of e-learning • Internet glitches • Unexpected glitches • Internal disturbances from the family • The students think that online learning is trivial • E-learning Error • Materials and assignments are not the same • When practicing using two slideshows • Examination assessment is not optimal 	Learning Barriers

(continued)

Table 4. (continued)

Labels or data on transcript	Category
<ul style="list-style-type: none"> • Google Meet • YouTube • Moodle • WhatsApp 	The learning media used
<ul style="list-style-type: none"> • Moodle • Google Meet • YouTube • Tutorial video • WhatsApp 	The most frequently used learning media
<ul style="list-style-type: none"> • Value has not been accumulated automatically • No notifications • No monitoring system 	Moodle's Disadvantages
<ul style="list-style-type: none"> • Complete Features 	Moodle's Advantages
<ul style="list-style-type: none"> • Cannot interact • Quota used large • Video recording must use additional applications 	YouTube's Disadvantages
<ul style="list-style-type: none"> • Easy to access • Videos can be downloaded 	YouTube's Advantages
<ul style="list-style-type: none"> • Video can be turned off 	Google Meet's Disadvantages
<ul style="list-style-type: none"> • There is Interaction • It can be recorded directly • Google products • User friendly • Easy access with the just code input 	Google Meet's Advantages
<ul style="list-style-type: none"> • Moodle • Video material uploaded on • e-learning • Google Meet with interaction and record 	The best learning
<ul style="list-style-type: none"> • Less time-efficient because you have to repeat the material • cannot continue learning activities • Wasteful quota 	Consequences of learning difficulties
<ul style="list-style-type: none"> • Provide lecturer tutorials/socialization about E-Learning • Make training how to edit videos • Every meeting can be on time • The collection of tasks only through 1 Moodle platform only • The lecturer's explanation should not be complicated • Students must actively ask questions • Added notification feature on E-learning • Lecturers understand the condition of the student network • More interesting video material • There is a monitoring system 	Repair Suggestions

(continued)

Table 4. (continued)

Labels or data on transcript	Category
<ul style="list-style-type: none"> • Blended Learning • Video recording of student practice • The material is better than going directly to the seven meetings at the beginning or fourteen. • Student active presentation 	Expected learning

Table 5. Axial Coding Table of Respondents Interview

Category	Types of Relationships Between Categories
Learning media used – learning process	The learning media used is a tool for the learning process
Moodle deficiency and Moodle excess – The most frequently used learning media	Moodle deficiency and Moodle excess are the most frequently used learning media selection factors.
Disadvantages of YouTube and advantages of YouTube – The most frequently used learning media	The disadvantages of YouTube and the advantages of YouTube are the selection factors for the most frequently used learning media.
Disadvantages of google meet and advantages of google meet – The most frequently used learning media	The disadvantages of google meet and the advantages of google meet are the selection factors for the most frequently used learning media.
Moodle Pros – The best learning media	The advantages of Moodle are the selection factors for the best learning media.
YouTube advantages – The best learning media	The advantages of YouTube are the selection factors for the best learning media.
Advantages of google meet – The best learning media	The advantages of google meet are the selection factors for the best learning media.
Learning barriers – Consequences of learning difficulties	Learning obstacles are the cause of the effects of learning
Due to learning barriers – Repair Suggestions	As a result of learning obstacles, suggestions for improvement can be made to minimize the consequences.
Perception of Online Learning – Expected learning	The current perception of online learning brings hope for better online learning.

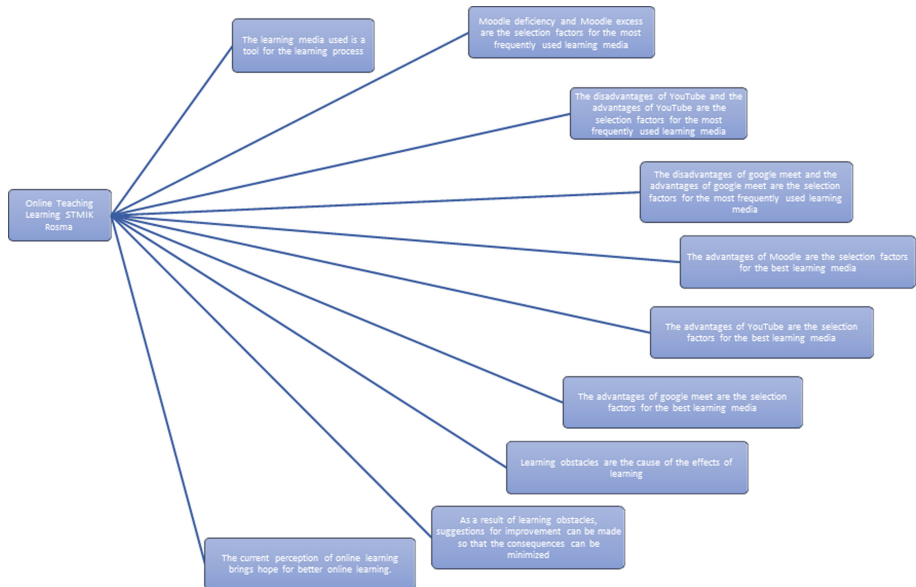


Fig. 1. Selective Coding Results

3.3 Results of Interview Analysis and Interpretation

3.3.1 The Learning Media Used is a Tool for the Learning Process

The interviews showed that the learning media used were tools for the learning process. This can be seen from the information from the interviewees, namely:

“What Moodle uses for the material, Google Meet for online, face-to-face learning, besides when unable to meet face-to-face online, there is also YouTube, so the video is recorded first and then uploaded to YouTube.”

The relationship between learning media used as facilities bridges the online learning process at STMIK Rosma. The interview results show that the media used as online learning media today are google meet, youtube, moodle, and WhatsApp. Google meet is used to conduct face-to-face meetings online or online. The results of the google meet meeting can be recorded to be used as video learning materials that are then uploaded into e-learning and can be accessed by students.

3.3.2 Moodle Deficiency and Moodle Excess Are the Most Frequently Used Learning Media Selection Factors

To obtain a good learning process, the selection of learning media must also be considered. The advantages and disadvantages of these media is one of the reasons for using these media. From the interviews, Moodle as an e-learning medium at STMIK Rosma has the advantage. Moodle is considered to have complete features for online learning, so Moodle is often used as a learning medium.

“...using Moodle because there is everything there, so, for example, making quizzes, uploading files, videos, etc., it is already available there, so it is complete there.”

Besides having advantages, Moodle also has disadvantages, including the mark has not been accumulated automatically, there is no notification, and there is no monitoring system.

“From the assessment, there is no final score there, so it can only give one value, for example, assignments, etc., so it has not been accumulated automatically. The other Diftafom available when the quiz has been accumulated.”

3.3.3 The Disadvantages of Youtube and the Advantages Are the Selection Factors for the Most Frequently Used Learning Media

Youtube is one media that is often used in online learning at STMIK Rosma. Similar to other media, YouTube has advantages and disadvantages. From the interview results, it can be seen that the advantages of YouTube are that it is easy to access and video material can be downloaded.

“...or the easiest one is youtube, so we look more affordable to other users.”

As for the drawbacks, youtube does not enable direct interaction between users. Other than that, to open youtube application, it takes a large quota. Also, to create video material that will be uploaded to youtube, a supporting application is needed for the video recording process.

“But in terms of, for example, uploading youtube and then sending the results to students, I am a little unsure that this way can be much better than us interacting directly, either online using google meet or offline, why because the interaction is not direct...”

3.3.4 The Disadvantages of Google Meet and the Advantages of Google Meet Are the Selection Factors for the Most Frequently Used Learning Media

As one of the learning media that is often used, Google Meet has the advantage of being able to interact directly, can be recorded directly, is a product of Google, and is easily accessible just by entering the existing code. This is known from sources who stated that:

“If I interact more with Google Meet, I rarely share videos because I want students to be present. The point is that even though there are no questions asked, I can see the interaction between them and me and see who appears even if they are absent. Also, I have more. Almost 70% of I use google meet. There is also a video, but I still give opportunities for those who cannot follow at that time. Please watch the video.”

3.3.5 The Disadvantages of Google Meet and the Advantages of Google Meet Are the Selection Factors for the Most Frequently Used Learning Media

Meanwhile, according to the resource person, the drawback of Google Meet is that student videos can be hidden/turned off.

“...so the weakness in hiding is that at times like that, we do not know whether to pay attention or not....”

3.3.6 The Advantages of Moodle Become the Selection Factor for the Best Learning Media

The advantages possessed by Moodle are one of the factors in choosing Moodle as one of the media that is considered the best. The informant stated: *“...but it is better to use Moodle because there is everything there, so, for example, making quizzes, uploading files, videos, etc., is already available there, so it is complete there.”*

3.3.7 The Advantages of YouTube Are the Selection Factors for the Best Learning Media

The advantages possessed by YouTube are one of the factors in choosing YouTube as one of the media that is considered the best. The informant stated that:

“If I work in the position, I prefer YouTube videos because we can repeat the video. For example, we still have time, and it can be repeated. You can download it first.”

3.3.8 The Advantages of Google Meet Are the Selection Factors for the Best Learning Media

The advantages possessed by Google Meet are factors in choosing Google Meet as one of the media that is considered the best. The informant stated that:

“In my personal opinion, I understand better when we meet face to face via Google Meet because when something is not clear, we can ask directly.”

3.3.9 Learning Obstacles Are the Cause of the Effects of Learning Obstacles

This study has successfully identified several obstacles in conducting online learning. Interviews have highlighted several obstacles in online teaching, including teachers were not able to control students, teachers were not able to detect the presence of students, the lack of supporting equipment, the location for video recording was not supported, lack of students' motivation to learn, students were conducive, students may not familiar with the use of e-learning platform, internet disturbances, unexpected disturbances, internal disturbances from families, students consider online learning trivial, e-learning errors, materials and assignments were not the same when practicing using two slideshows, exam assessments were not optimal. These constraints certainly affect the online learning process that runs. The consequences of these obstacles include a lack of time efficiency because the instructors have to repeat the material, may not be able to continue learning activities, and waste of students' internet quotas. This can be seen from the informant

who stated that: *“Perhaps the obstacle for going online is that there is an internet network if the internet network is constrained, certainly, the lectures will not run smoothly, yes, the quota is also if the quota runs out, that is right, the term cannot continue the activity, maybe it is, and if it is from the lecture process, maybe it is more about the interaction, we are a bit limited because sometimes there are many students, but because the name is a practical course, we have to try one by one, so that is the obstacle, so that is the obstacle, so what is the explanation or the interaction is rather limited because if we have to ask all of them one by one, it takes quite a long time and consumes the quota of fellow students.”*

3.3.10 As a Result of Learning, Obstacles Raise Suggestions for Improvement to Minimize the Consequences

To minimize the consequences of obstacles and improve the online learning process, suggestions for improvement are to provide lecturer with tutorials/socialization on e-Learning, make training on how to edit videos, every meeting can be on time, collect assignments only through Moodle platform, the lecturer’s explanation should not be complicated, drive the students to be an active learner, add notification features to e-learning, lecturers understand student network conditions, video material is more interesting, and there is a monitoring system.

“It is like this, in my opinion, there must be a lecturer, maybe you have to have a record of the material recorded before online teaching because to publish it to Rosma, there are activities not only online but offline, for example using YouTube, right, Rosma already exists. In the special room we want to publish, the lecturer is allowed to use the room to record the material, so it is possible if you cannot edit it yourself, maybe you can get help from the campus, or you want to make a small training on how to edit the video, so basically it is not just PowerPoint material. However, the material is more interesting so that we can publish it on youtube or something else. The easiest way is youtube, so we are more visible to other users, students may be able to get to know STMIK Rosma better”.

3.3.11 The Current Perception of Online Learning Brings Hope for Better Online Learning

The perception of online learning among respondents differs. Some respondents argued that the current learning process has been going well without significant interference. They believe that the current learning process is not too difficult to catch up. Alternatively, in other words, the present learning process has successfully accommodated the needs, is efficient, and beneficial for the learners. However, several resource persons gave a different perception, namely online learning, which is currently running less effectively and must be evaluated first. One of the informants stated that;

Table 6. The Most Used Online Learning Percentage

Online Learning	Total	Percentage %
Google Classroom	3	4%
Google Meet	63	74%
Moodle	15	18%
Telephone	1	1%
Video YouTube	2	2%
WhatsApp/Telegram	1	1%
Total	85	100%

“Alhamdulillah, there are no obstacles, it means that according to the rules set by the government, it has normally been running and it is not a problem, either facilities or anything else, especially if this is supported by quotas from the Ministry of Education and Culture, it is also very helpful, and this also makes it easier for students whom I do not have enough time to study face-to-face....”

Meanwhile, other sources stated that:

“In my opinion, with online learning, to be honest, online is less effective because we cannot meet face-to-face and want to ask questions directly, right, it means that online is less effective, even though it is shown, it is just not so effective online itself.”

Another informant stated that:

“...then whether it has been effective or not, maybe it will be the next question by assessing to what extent the satisfaction of users, in this case, students getting online learning, is the same quality as offline.”

3.4 Quantitative Data Processing

The quantitative data obtained from the survey results are then processed using the percentage formula to produce the data in Table 6.

The table above shows that the most widely used online learning is Google Meet and Moodle, with the percentages of 74% and 18%, respectively. From the research results, the best online learning to use is google meet, moodle and youtube videos, which are 61%, 14%, and 15%, respectively. As can be seen from Table 7.

Table 7. The Best Online Learning Percentage Table

Online Learning	Total	Percentage %
Google Classroom	4	5%
Google Meet	52	61%
Moodle	12	14%
Streaming Video YouTube/Facebook	1	1%
Video YouTube	13	15%
Etc.	3	4%
Total	85	100%

4 Conclusion

Based on the results of the discussion of the research conducted, the following conclusions can be drawn:

- a. From the data obtained in this study, it can be seen that the Online Teaching-Learning run at STMIK Rosma during the Covid-19 pandemic is perceived differently by the stakeholders. Some respondents considered that online teaching-learning has been running smoothly without significant obstacles and problems. While others believe that online teaching-learning is yet to be effective and still needs to be assessed further.
- b. Online Teaching-Learning platforms that are used widely at STMIK Rosma during the Covid-19 pandemic are Moodle, Google Meet, and Youtube. This finding is further supported by the results obtained from the qualitative percentage where Google Meet has a percentage of 75%, Moodle has 18%, and YouTube is 2%.
- c. According to the interviews conducted, the Online Teaching-Learning platforms considered best used at STMIK Rosma are Moodle, video material uploaded to e-learning, and Google meetings with interactions and records. Meanwhile, quantitative data processing showed that 61% of respondents chose Google Meet as the best teaching-learning platform, 14% chose Moodle, and 15% used YouTube videos.

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References

1. Pradana, A. A., Casman, C., & Nur'aini, N. (2020). Pengaruh Kebijakan Social Distancing pada Wabah COVID-19 terhadap Kelompok Rentan di Indonesia. *Jurnal Kebijakan Kesehatan Indonesia: JKKI*, 9(2), 61–67.
2. World Health Organization. (2020). Naming the coronavirus disease (COVID-19) and the virus that causes it.
3. Oktriananda, M., Erlinda, S., Arianto, J., Oktriananda, M., Erlinda, S., & Arianto, J. (2020). Perception of PPKN students Universitas Riau towards the Republic of Indonesia Government Regulation number 21 of 2020 concerning large-scale social restrictions in the context of accelerating handling of corona virus Persepsi Mahasiswa Ppkn Universitas R. *Administrative and Environmental Law Review*, 7(21), 1–12.
4. Kemenkes, R. I. (2020). Kementerian Kesehatan Republik Indonesia. Peraturan Menteri Kesehatan Republik Indonesia Nomor 9 Tahun 2020 Tentang Pedoman Pembatasan Sosial Berskala Besar Dalam Rangka Percepatan Penanganan Corona Virus Disease 2019 (Covid-19). Jakarta.
5. Syarifudin, A. S. (2020). Impelementasi Pembelajaran Daring Untuk Meningkatkan Mutu Pendidikan Sebagai Dampak Diterapkannya Social Distancing. *Jurnal Pendidikan Bahasa dan Sastra Indonesia Metalingua*, 5(1), 31–34. <https://doi.org/10.21107/metalingua.v5i1.7072>
6. Handarini, O. I., & Wulandari, S. S. (2020). Pembelajaran Daring Sebagai Upaya Study From Home (SFH) Selama Pandemi Covid 19. *Jurnal Pendidikan Administrasi Perkantoran*, 8(3), 498–503. <https://doi.org/10.1093/fampra/cmy005>
7. Gikas, J., & Grant, M. M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones & social media. *The Internet and Higher Education*, 19, 18–26. <https://doi.org/10.1016/j.iheduc.2013.06.002>
8. Wicaksana, E. (2020). Efektifitas Pembelajaran Menggunakan Moodle Terhadap Motivasi Dan Minat Bakat Peserta Didik Di Tengah Pandemi Covid-19. *EduTeach: Jurnal Edukasi Dan Teknologi Pembelajaran*, 1(2), 117–124.
9. Febrilia, B. R. A., Nissa, I. C., Pujilestari, P., & Setyawati, D. U. (2020). Analisis Keterlibatan dan Respon Mahasiswa dalam Pembelajaran Daring Menggunakan Google Clasroom di Masa Pandemi Covid-19. *FIBONACCI: Jurnal Pendidikan Matematika Dan Matematika*, 6(2), 175–184
10. Haqien, D., & Rahman, A. A. (2020). Pemanfaatan Zoom Meeting untuk Proses Pembelajaran pada Masa Pandemi Covid-19. *SAP (Susunan Artikel Pendidikan)*, 5(1). <https://doi.org/10.30998/sap.v5i1.6511>
11. Langi, J. P. (2021). Pengaruh Pembelajaran Fisika Secara Online Berbasis Zoom Meeting Terhadap Hasil Belajar Mahasiswa. *Jurnal Syntax Admiration*, 2(1), 85–93.
12. Syafiq, M., & Rahman, A. (2020). Teaching and learning calculus through video conference during the Covid-19 pandemic: Google Meet (no. September, pp. 88–95).
13. Simamora, R. M. (2020). The challenges of online learning during the COVID-19 pandemic: an essay analysis of performing arts education students. *Studies in Learning and Teaching*, 1(2), 86–103. <https://doi.org/10.46627/silent.v1i2.38>
14. Halawa, M. V. B. (2021). Efektivitas Pemanfaatan Platform Media Sosial dalam Pembelajaran Praktikum Secara Daring Maria. *Attractive: Innovative Education Journal*, 3(1), 53–64.
15. Mariani, N. M. N. (2020). Pemanfaatan Media Sosial Whatsapp dalam Pembelajaran Daring Untuk Meningkatkan Hasil Belajar Pendidikan Agama Hindu di Tengah Pandemi COVID-19 Kelas VI Semester I SDN 1 Dawan Klod. *cetta*, 3(3i).
16. Bina, N. S. (2021). Pengaruh Platform Pembelajaran Daring Youtube Terhadap Kemampuan Matematis di Masa Pandemi Covid-19. *Laplace: Jurnal Pendidikan Matematika*, 4(1), 32–39. <https://doi.org/10.31537/laplace.v4i1.461>

17. Rindawati, V. (2020). Penerapan Model Pembelajaran Discovery Learning Melalui Instagram untuk Meningkatkan Pembelajaran Daring pada Materi Globalisasi. *Habitus: Jurnal Pendidikan, Sosiologi, & Antropologi*, 4(1), 51. <https://doi.org/10.20961/habitus.v4i1.45721>
18. Indrawati. (2018). *Metode Penelitian Kualitatif (Manajemen dan Konvergensi Teknologi Informasi dan Komunikasi)* (1st ed.). PT. Refika Aditama.
19. Wardhono, V. W. (2011). Penelitian grounded theory. *Bina Ekon. Maj. Ilm. Fak. Ekon. Unpar*, 15(1)
20. Jatmoko, D., & Faizun, M. (2020). Persepsi Mahasiswa Terhadap Pelayanan Pembelajaran Online di Masa Pandemi Covid-19. *Jurnal Pendidikan Surya Edukasi*, 6(1), 104–113. <https://doi.org/10.37729/jpse.v6i1.6495>
21. Edelhauser, E., & Lupu-Dima, L. (2020). Is Romania prepared for learning during the COVID-19 pandemic? *Sustainability*, 12(13), 1–29. <https://doi.org/10.3390/su12135438>
22. Demuyakor, J. (2020). Coronavirus (COVID-19) and online learning in higher institutions of education: A survey of the perceptions of Ghanaian international students in China. *Online Journal of Communication and Media Technologies*, 10(3), e202018. <https://doi.org/10.29333/ojcm/8286>
23. Sujarwo, S., Sukmawati, S., Akhiruddin, A., Ridwan, R., & Siradjuddin, S. S. S. (2020). An analysis of university students' perspective on online learning in the midst of Covid-19 pandemic. *Jurnal Pendidikan Dan Pengajaran*, 53(2), 125–137. <https://doi.org/10.22606/jaer.2020.52005>
24. Famularsih, S. (2020). Students' experiences in using online learning applications due to COVID-19 in English classroom. *Studies in Learning and Teaching*, 1(2), 112–121. <https://doi.org/10.46627/silent.v1i2.40>
25. Patricia, A. (2020). College students' use and acceptance of emergency online learning due to COVID-19. *International Journal of Educational Research Open*, 100011. <https://doi.org/10.1016/j.ijedro.2020.100011>
26. Mishra, D. L., Gupta, D. T., & Shree, D. A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open*, 100012. <https://doi.org/10.1016/j.ijedro.2020.100012>
27. Putra, M. (2017). Mixed Methods: Pengantar dalam Penelitian Olahraga. *Jurnal Pembelajaran Olahraga*, 3(1).
28. Strauss, A., & Corbin, J. (1990). *Qualitative research; grounded theory procedure and techniques*. Sage Publication.
29. Ali, M. (1984). Penelitian Kependidikan Prosedur dan Strategi. Angkasa.

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