

THE IMPACT OF COVID19 PANDEMIC ON ONLINE LEARNING PROCESS IN THE COLLEGE AT SOUTHEAST SULAWESI

Alchamdani Alchamdani^{1*}, Fatmasari², Eka Rahmadani Anugrah³, Nahda Putri Sari⁴, Freddrika Putri⁵, Astina Astina⁶

^{1,2}Faculty of Public Health, Airlangga University, Surabaya 60115, Indonesia

³Faculty of Psychology, Airlangga University, Surabaya 60115, Indonesia

⁴Faculty of Public Health, Hasanuddin University, Makassar 90245, Indonesia

⁵Faculty of Public Health, Diponegoro University, Semarang 50275, Indonesia

Public Hospital of Kolaka Timur, Ladongi 93573, Indonesia

Corresponding Author*:

alchamdani26@gmail.com

Article Info

Submitted : 29 July 2020
In reviewed : 6 September 2020
Accepted : 22 September 2020
Available Online : 30 September 2020

Keywords : *Impact of Covid19, Online Learning, College*

Published by *Fakultas Kesehatan Masyarakat Universitas Airlangga*

Abstract

Introduction: The health crisis that occurred due to the Covid19 pandemic has an impact on the education sector. Universities in Southeast Sulawesi issued a policy to study at home during the Covid19 emergency response period. The existence of the study at home policy caused the change in the learning. The learning process cannot be done directly and is transferred through online learning. The research objective was to determine the impact of the Covid19 pandemic of the online learning process of universities in Southeast Sulawesi. **Method:** The type of research is a descriptive research and the technique is purposive sampling. The sample in this study were 170 students from several universities in Southeast Sulawesi. Data collection techniques by distributing the questionnaires using google form. **Result and Discussion:** The results show that the application of online learning is a new experience that provides convenience and flexibility in studying without having to go to campus. Regardless, online learning is still experiencing obstacles. The availability of inadequate network access resulted in unclear communication and instructions in lectures. The ability of the economy to fulfill internet quotas hinders student participation in taking online lectures. Excessive workload makes student concentration decrease. **Conclusion:** The government needs to ensure the availability of adequate internet network access in all regions and campuses provide subsidized internet quota for students. So, the lecture activities can be run smoothly and as expected.

INTRODUCTION

Coronavirus Disease 2019 (Covid19) has caused major changes to the existing order of life at this time. Covid19 is a new disease that has never been identified in humans. The cause of the Covid19 called virus Sars-CoV-2 (1). Covid19 has become a pandemic disease that attacks the 215 countries in the world. Based on data from the World Health Organization (WHO) to 13 July 2020 recorded 12,750,275 case confirmation and 566,355 cases of death worldwide (2).

The spread of Covid19 which is relatively quick. This disease affects the respiratory system of humans (3). Countries affected by the Covid19 has been appealed, and requires its citizens to stay at home during the pandemic Covid19. Given the spread of the disease is very quick. Case Covid19 in Indonesia until 13 July 2020 recorded 76,981 the case of confirmation, 36,689 cases cured, 36,636 cases in the care, and 3.656 of the case died, which happened in 34 provinces and 461 regency/city (4). Data Task force Covid19 Southeast Sulawesi Province to 13 July 2020, the case Covid19 confirmed as much as the 518 cases, 9 cases died, and 336 cases cured (5).

The education sector is experiencing changes due to the pandemic Covid19 (6). The government through Letter of the Minister of education and culture No. 36962/MPK.A/HK/2020 about Online Learning and Working from Home to Prevent the Spread of Covid19 as an effort to prevent the spread of Covid19 (7). Learning system undergoes a change from face-to-face to online (8). The implementation of online learning carried out in order to reach out to students from different regions.

The efforts made to prevent the spread of Covid19 by applying a physical distancing, keep physical distance, and remain at home. The entire leadership of the state and private universities in Southeast Sulawesi. Issued a Circular Letter in the pandemic Covid19 all Teaching and Learning Activities is replaced by the method of online learning. For practical activities, seminars, guest lectures and extracurricular activities of students rescheduled and adapted to the conditions of the development of the Covid19.

Colleges anticipate Covid19 with the adoption of online learning. The use of technology in distance learning online can be done using the facilities of the internet network. The use of technology to facilitate students and lecturers to conduct lectures, though in a different place.

The interaction online allows lecturers and students within a different place (9). Conditions within a different place when the course of preventing any physical contact and encouraging the implementation of

social distancing. The application of social distancing as an Action to prevent the spread of Covid19 (10).

The participation of students in lectures can be improved with online learning (11). The use of technology in learning is made to cope with completing tasks and making decisions. The goal of online learning is to maximize the provision of information lectures that can be accessed anytime and anywhere (12).

Renewal of policy learning from home online gives impact to the college, faculty, and students. The purpose of the study to determine the impact of a pandemic Covid19 against the process of online learning. Based on the description above, the researcher conducted a survey to see the impact of a pandemic Covid19 against the process of online learning universities in Southeast Sulawesi.

METHOD

This research was a descriptive study with a survey technique. This technique was useful for gathering information from a number of people about a particular topic or issue (13). Data collection techniques by distributing questionnaires using google form. This research was conducted from 27 May to 3 June 2020. The population in this research were university students in Southeast Sulawesi. This study used purposive sampling which were 170 students from several universities in Southeast Sulawesi with the subject of active students in Southeast Sulawesi who were willing to fill out a questionnaire via google form. The questions asked in the survey were the identity of the university, the characteristics of the respondents, and the learning process during the Covid19 pandemic. Data were analysed descriptively and presented in the form of tables and figures as well as narrative explanations

RESULT

Characteristics of Respondents

The distribution of characteristics of respondents are presented in Table 1. The majority of respondents of the female gender amounted to 72.9% and 27.1% were male gender. Respondents with the status of state universities by 84.7% more of the respondents hailing from private universities by 15.3%. The majority of respondents are taking the education level Bachelor degree by 87.0% and the least level of education Doctor degree by 0.6%.

Respondents who study in the field of science of science/the exact amounted to 69.4% and the field of social sciences humanities amounted to 30.6%. Based on the region of origin, respondents who lived with the location of the campus and the district/city

together amounted to 64.1%, the location of the campus and district/city difference of 22.9%, the location of the campus and the province of beda by 13.0%.

Table 1. The Distribution of Characteristics of Respondents

Variable	Total	Percentage (%)
Gender		
Male	46	27.1
Female	124	72.9
The Status of the College		
The state	144	84.7
Private	26	15.3
The Level of Education		
Diploma	12	7.1
Bachelor Degree	148	87.0
Mater Degree	6	3.5
Doctor Degree	1	0.6
Profession	3	1.8
The Field of Science		
Social Humanities	52	30.6
Science/Exact Sciences	118	69.4
The Area of Origin		
One Regency/City with the Location of the Campus	109	64.1
Different Districts/Cities with Campus Locations	39	22.9
Different Province with the Location of the Campus	22	13.0

Facilities of Online Learning in the Pandemic Covid19

Distribution facilities of online learning in the pandemic Covid19 are presented in Table 2. Software/tools used by the respondents in online learning note the use of mobile 72.4% higher compared to laptop/notebook of 27.6%. Internet connection most often used is the internet/tethering from the phone itself amounted to 66.5% and the internet connection that is rarely used is a network a Local Area Network (LAN) by 1.8%.

Table 2. Facilities of Online Learning in the Pandemic Covid19

Variable	Total	Percentage (%)
The Device/Tool		
Laptop/Notebook	47	27.6
Mobile	123	72.4
Internet Connection		
Wi-Fi	48	28.2
Internet/tethering from phone itself	113	66.5
Tethering of others phone	6	3.5
LAN network	3	1.8
The Model Of Online Interaction		
Face-To-Face	29	17.1
Non Face-To-Face	23	13.5
The mixture	118	69.4
An Online Learning		
Virtual Class	5	2.9
Google Classroom	51	30.0
Zoom	112	65.9
Other	2	1.2

Variable	Total	Percentage (%)
The Readiness of The Lecture Online		
Very Ready	13	7.6
Ready	78	45.9
Less Ready	51	30.0
Very Not Ready	4	2.4
Forced To Ready	24	14.1

Models of online interaction that is used is face-to-face and non face-to-face is conditionally amounted to 69,4%, face-to-face direct interaction (Zoom, Webex, Skype, Webinars, Whats App, Line) of 17.1% and non face-to-face (E-mail, Youtube) of 13.5%. The application of online learning the most often used is the Zoom amounted to 65.9%, Google Classroom by 30%, the Virtual Class of 2.9%, and other 1.2 percent. Based on the calculation of the likert scale shows the attitude of the respondents in following the online learning in the positive category. This is indicated by the scores of respondents who obtained at 562 (66.1%) are located between the scores of 510 (median) and 680 (quartile 3). It means that overall respondents are ready to participate in online learning.

Perceptions of Online Learning

Internet network facilities are less adequate to be problems in the sustainability of online learning. Be aware of 34.7% of the respondents still feel less to the facilities of the internet network. The quality of the presentation of the material by the lecturer during lectures in the form of info graphics, images, animation, and video. The respondents feel quite well with the presentation of the material given by 38.8%. Delivery of material during lectures is considered good of 39.5%. An overview of respondents ' perception towards online learning can be seen in Figure 1.

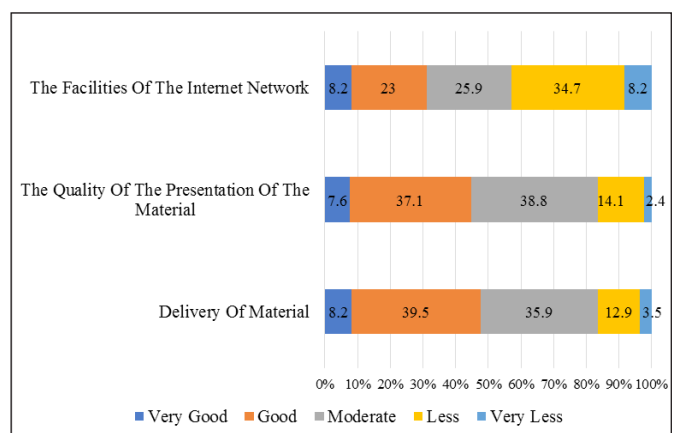


Figure 1. Perceptions of Online Learning

The Advantages of Online Learning

The application of online learning in the pandemic Covid19. To make the respondents assume that the learning method implemented as a new experience of

37.1%, it is not necessary to the campus by 21.2%, is more flexible and relax by 15.9%, lecture material documented by 13.5%, more dare to ask of 8.2%, and the efficiency of time and cost by 4.1%. An overview of the advantages of online learning can be seen in Figure 2.

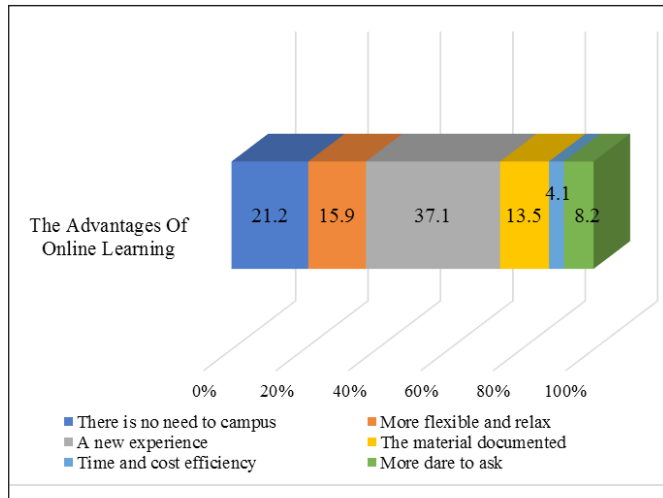


Figure 2. The Advantages of Online Learn

The Shortage of Online Learning

The shortage experienced by respondents with the adoption of online learning. As for its shortcomings is a network of the internet is sometimes not stable of 20.6%, the burden of the task overload of 24.7%, the wasteful data packets by 15.9%, the material difficult to understand of 14.1%, the concentration sometimes decreased by 11.8%, is often replaced online tasks of 8.2%, the schedule of the lecture is often replaced by 2.9%, and the lecturer is less interactive and communicative by 1.8%. An overview of the shortcomings of online learning can be seen in Figure 3.

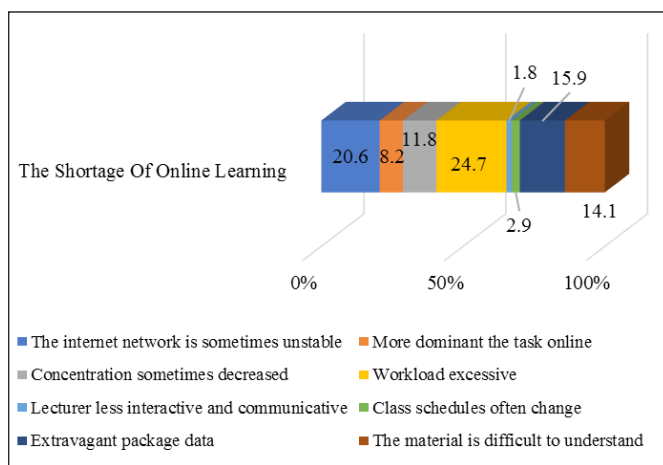


Figure 3. The Shortage of Online Learning

Barriers of Online Learning

Barriers faced by the respondents during the online learning implemented is the communications and instructions that are less clear by 30.0%, access the

internet of 24.7%, financial difficulties for tuition online by 22.9%, and the schedule of lectures is not apparent. 22.4%. An overview of the barriers online learning can be seen in Figure 4.

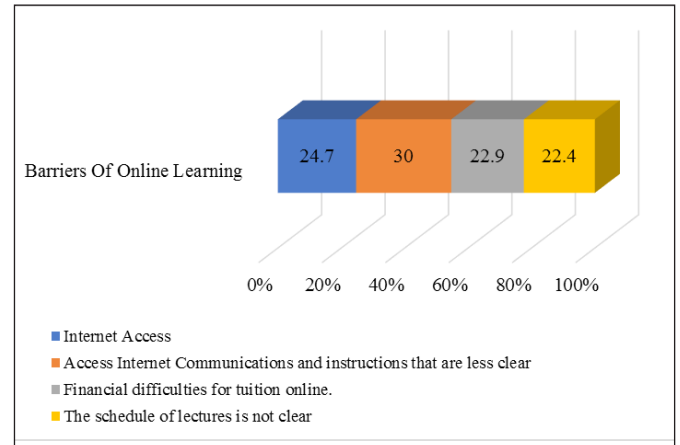


Figure 4. Barriers of Online Learning

The perception of Learning Methods

Application of the method of online learning in the pandemic Covid19. Require students to adjust themselves with the methods of the new learning. Online learning has been implemented for the direction to remain at home. The differences method of learning is perceived between online learning and face-to-face in the classroom. Amounted to 97.1% of the respondents consider learning face-to-face is better than online learning. Only 2.9% of respondents who think online learning is better than lecture face-to-face. An overview of respondents ' perception towards the learning method can be seen in Figure 5.

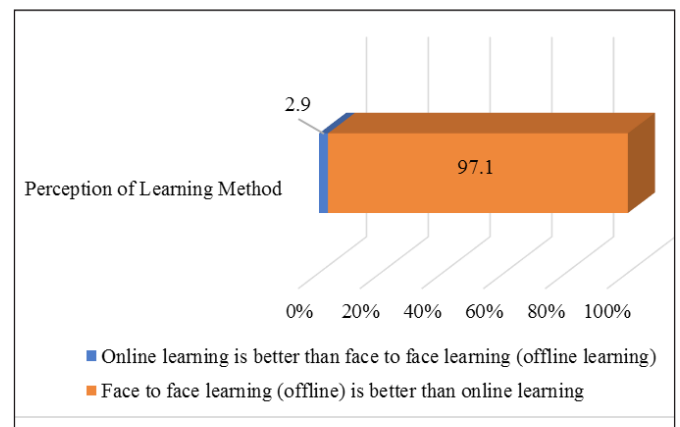


Figure 5. The perception of Learning Methods

DISCUSSION

Facilities of Online Learning in the Pandemic Covid19

The college already utilizes the technology in campus life, such as providing a website facility which can be accessed by the public. So, information can be obtained easily. Such as information about the curriculum,

tuition, faculty, facilities, learning, process of teaching, extracurricular activities of students, and other.

The process of online learning by universities in Southeast Sulawesi have been using E-Learning as a learning method. However, its use only occasionally. This is due to the use of the online learning system requires a fee that is relatively expensive. The cost of a relatively expensive highly comparable with the benefits obtained for students and lecturers in the learning process and mastery of technology.

The readiness of the students in participating in online learning need to be considered. There are still students who are constrained to follow the online learning because internet access is not stable, the ability to buy the internet package. The conditions of access networks that are not stable require students to find a place that internet access in order to follow the lecture. The ability of students to buy a package of internet become an obstacle to follow the lecture online. This affects the readiness of the student in following the lectures online. So, universities need to give subsidy quota of internet for the students. So the learning process can run smoothly.

The preparation that is done before the process of online learning begins, the lecturers prepare teaching materials in the form of power point or *Portable Document Format* (PDF). Lecturers provide information to students about the media that will be used and the technical implementation of the course. So, the students were ready to follow lectures at the agreed time (14). The competence of the lecturers to determine the success of online learning (15). Model and learning media can cultivate the learning interest of students (16). The device used in online learning is the mobile and the laptop. The use of mobile phones and laptops can improve student learning outcomes (17).

Faculty and students need to set learning media are effective to use during lectures (18). Mastery of the media of online learning by students and lecturers is very necessary to facilitate the learning process. Training in the use of instructional media needs to be done (19). Mastery of media that is better able to support learning activities running smoothly and according to the objectives.

Media online learning in the pandemic Covid19 need to be adjusted with the ability of the college and should consider the condition of the student. Some lecturers use the app *Zoom Meeting*, *Google Classroom*, *Virtual Class* as media in the implementation of online learning. Several campuses provide a method of E-learning or a special application in the learning process.

Application that is often used in online learning is a Zoom Meeting. App Zoom Meeting made a lecturer and students can see each other (20). So, the lectures can be implemented with better. App use the Zoom Meeting in online learning is quite effective, but internet connection problems become an obstacle when the process of the lecture. It takes a network the internet which is stable so that the lecture can run smoothly. Learning is not yet at the stage of assessment. So, can not be said to be successful (21).

Web services Google Classroom is ideal for use in lectures. It helps in saving time, set the learning, and improve communication with students (22). The use of Google Classroom have not been able to improve the ability of cognitive and affective student in the application of behavior of hand hygiene (23). Use Whats App as an instant messaging application as a model of interaction online a non face-to-face (24). In addition, online learning can be done with Facebook and Instagram (25).

The Advantages of Online Learning

The spread of Covid19 can be prevented with the implementation of online learning. Learning online using the application available. Students and faculty can interact using the app with the help of the internet network (26). Students do not need to the campus and college more flexibility and relax. The lecture schedule can be arranged with the lecturer. Place while following the lectures can be customized by each person. The condition of the place which internet access well to facilitate the lecture.

Online learning conditions to facilitate student wherever they are to participate in the learning process. The process of learning online from home provide a sense of security for students in the pandemic Covid19. Online learning can be accessed anywhere and anytime with the condition of facilities that support the lecture (27). Lecturers and students more easily determine the schedule of lectures without regard to the location of the lecture (28). The interaction of students and faculty effective with response feedback in online learning (29). The improvement of learning outcomes and ability to master online learning technology in the pandemic Covid19 is expected.

The response of students towards online learning is quite positive. Considering the students as the young generation who are already technology literate than lecturers. The students had no difficulty and more quickly understood in the try the application of online learning. The enthusiasm and spirit of students in following the lectures, it looks more fun because without a load, not too formal, discussion between lecturer and student can be done without feeling awkward.

Online learning does not give pressure to the students. So, students are more open to ask questions and discuss related lecture material presented by the lecturer. Lecture conducted from different locations (9). Students can express an opinion without feeling awkward (30).

Obstacles of Online Learning

The application of learning face-to-face during this time, resulting in students not familiar with online learning. In the pandemic Covid19 students learn online learning system independently through youtube, google, and discussions with friends. As well as practicing media online learning will be used.

Transfer of learning face-to-face in the classroom into online learning makes the students who come from outside the area choose to return home. Internet access is not adequate in the village hinder the students to participate in online learning. There are still some areas which internet access has not been adequate. Students miss lectures and collecting overdue college assignments. The majority of students access the internet using the internet connection of the phone with the internet package purchased, while a small part using the Wi-Fi service.

The use of an online learning requires a relatively expensive to buy the internet package. Students attend a video conference for several hours requires internet package which is quite a lot. Financial difficulty for the cost of online courses resulted in some students not attending lectures. While the presence of students affects the feasibility of online learning. Restrictions on physical interaction while using the transport with online learning (36). This can be a solution to transfer the cost of transportation when I have to come to class to buy the internet package (37).

Online learning activities can be hampered because of the condition of the state of the home environment is noisy and the internet network is not stable. Internet connection is interrupted resulting in the information obtained during lectures is less clear (38). So, the lecture material difficult to understand.

Another challenge that must be faced in online learning is the difficulty of finance to buy the internet package. Lecturers should ensure the readiness of the students in participating in online learning. Then need to be agreed applications that do not require a lot of internet quota. As do the discussion online through an instant messaging application (30).

The Perception of Learning Methods

The advantages of learning face-to-face is forming a mental discipline, it is easy in the provision

of the reinforcement (reinforcement), easy in the assessment process, and as a vehicle to interact (39). In addition, learning face-to-face can support the ability of socialization between faculty and students, and between fellow friends. Lecturers can also directly observe attitudes, behaviors of students during lectures (37).

The development of technology and information in the era of the industrial revolution 4.0 which is very fast. Students should be able to run and utilize technology in the learning process. Considering the application of online learning is very needed in the era of the industrial revolution 4.0 (40). Based learning online can reduce the problems associated with traditional learning (41). Educators must be able to interact well with the students during the learning process (42). The application of online learning can improve the cognitive ability of students in the process of remembering and solving problems. In addition, it can improve the ability of affective-related values and appreciation (43).

ACKNOWLEDGEMENT

We would like to thank all the respondents who have participated in this study voluntarily without any intervention from any party.

CONCLUSION

The process of online learning on the pandemic Covid19 still has some obstacles in its implementation. Access the internet a bad result in learning are not optimal. The availability of internet access, the ability to access instructional media, the ability to purchase internet quota, and online learning are used to determine student participation in the learning process. The lecture material is difficult to understand because learning is not interactive and communicative. Most of the students consider learning face-to-face is better than online learning. Factors that must be addressed together in an effort to support the smooth running of online learning in the pandemic Covid19 is the government needs to ensure the availability of network access internet access offered throughout the area and the campus subsidizes internet quota for students. So, the class can run smoothly and according to expectations.

REFERENCES

1. Ministry of Health of Republic Indonesia. Guidelines for Preparedness against Coronavirus Disease (Covid19). Jakarta: Ministry of Health of Republic Indonesia; 2020 <https://infeksiemerging.kemkes.go.id/>
2. World Health Organization. WHO Coronavirus Disease (Covid19) Dashboard. Geneva: World Health Organization; 2020 <https://covid19.who.int>

3. Rothan HA, Byrareddy SN. The Epidemiology and Pathogenesis of Coronavirus Disease (Covid19) Outbreak. *Journal of Autoimmunity*. 2020;(109)102433:1-4. <https://doi.org/10.1016/j.jaut.2020.102433>
4. Ministry of Health of Republic Indonesia. Current Situation of Coronavirus Disease (Covid19) Development. Jakarta: Ministry of Health of Republic Indonesia; 2020. <https://www.kemkes.go.id/>
5. Province Health Office of Sulawesi Southeast. Info Covid19 Southeast Sulawesi. Kendari: Province Health Office of Sulawesi Southeast; 2020. <https://dinkes.sultraprov.go.id/info-Covid19-sultra/>
6. Zhang W, Wang Y, Yang L, Wang C. Suspending Classes without Stopping Learning: China's Education Emergency Management Policy in the Covid19 Outbreak. *Journal of Risk and Financial Management*. 2020;13(3):1-6. <https://doi.org/10.3390/jrfm13030055>
7. The Ministry of Education and Culture Republic of Indonesia. Letter of the Minister of education and culture No. 36962/MPK.A/HK/2020 about Online Learning and Working from Home to Prevent the Spread of Covid19. Jakarta: The Ministry of Education and Culture Republic of Indonesia; 2020. <https://www.kemdikbud.go.id/>
8. Arora AK, Srinivasan R. Impact of Pandemic Covid19 on the Teaching–Learning process: A Study of Higher Education Teachers. *Prabandhan*. 2020;13(4):43-56. <http://dx.doi.org/10.17010/pijom%2F2020%2Fv13i4%2F151825>
9. Bell S, Douce C, Caeiro S, Teixeira A, Martin-Aranda R, Otto D. Sustainability and Distance Learning: A Diverse European Experience?. *Open Learning*. 2017;32(2):95-102. <https://doi.org/10.1080/02680513.2017.1319638>
10. Stein RA. COVID-19 and Rationally Layered Social Distancing. *International Journal of Clinical Practice*. 2020;74(7): e13501. <https://doi.org/10.1111/ijcp.13501>
11. Pratiwi ER, Wonorahardjo S, Arief M. Partisipasi Online dalam Pembelajaran Community of Inquiry (COI) pada Materi Distilasi. *Jurnal Pendidikan*. 2016;1(7):1410-1416. <http://dx.doi.org/10.17977/jp.v1i7.6585>
12. SCH Hoi, D Sahoo, J Lu, P Zhao. Online Learning: A Comprehensive Survey. *Preprint ArXiv*. 2018;1-100. <https://arxiv.org/abs/1802.02871>
13. Gunawan H. Dasar-Dasar Metodologi Penelitian Pendidikan. Bandung: PT Remaja Rosdakarya; 2017.
14. Nurmila N. Optimalisasi Pembelajaran Daring di UIN SGD Bandung dalam Upaya Menghentikan Penyebaran Virus Corona. *Skripsi*. Bandung: UIN Sunan Gunung Djati; 2020. <http://digilib.uinsgd.ac.id/id/eprint/30559>
15. Zein M. Peran Guru dalam Pengembangan Pembelajaran. *Journal UIN-Alauddin*. 2016;5(2):274-285. <https://doi.org/10.24252/ip.v5i2.3480>
16. Abdullah R. Pembelajaran dalam perspektif Kreativitas Guru dalam Pemanfaatan Media Pembelajaran. *Lantanida Journal*. 2016;4(1):35-49. <https://doi.org/10.22373/lj.v4i1.1866>
17. Anggrawan A. Analisis Deskriptif Hasil Belajar Pembelajaran Tatap Muka dan Pembelajaran Online Menurut Gaya Belajar Mahasiswa. *MATRIK*. 2019;18(2):339-346. <https://doi.org/10.30812/matrik.v18i2.411>
18. Mulyaningsih I, Nurfiana N, Zahidin MA. Pengembangan Pembelajaran Berbasis Riset di Jurusan Tadris Bahasa Indonesia FITK, IAIN Syekh Nurjati Cirebon. *Journal Indonesian Language Education and Literature*. 2017;2(2):121-135. <http://dx.doi.org/10.24235/ileal.v2i2.1388>
19. Moorhouse BL. Adaptations to a Face-to-Face Initial Teacher Education Course 'Forced' online Due to the Covid19 Pandemic. *Journal of Education for Teaching*. 2020;1(1):1-3. <https://doi.org/10.1080/02607476.2020.1755205>
20. Naserly MK. Implementasi Zoom, Google Classroom, Dan Whatsapp Group dalam Mendukung Pembelajaran Daring (Online) Pada Mata Kuliah Bahasa Inggris Lanjut (Studi Kasus Pada 2 Kelas Semester 2, Jurusan Administrasi Bisnis, Fakultas Ekonomi dan Bisnis, Universitas Bina Sarana Informatika Jakarta. *Aksara Public*. 2020;4(2):155-165. <http://aksarapublic.com/index.php/home/article/view/417>
21. Windhiyana E. Dampak Covid19 terhadap Kegiatan Pembelajaran online di Sebuah Perguruan Tinggi Kristen di Indonesia. *Perspektif Ilmu Pendidikan*. 2020;34(1):1-8. <https://doi.org/10.21009/PIP.341.1>
22. Iftakhar S. Google Classroom: What Works and How?. *Journal of Education and Social Sciences*. 2016;3(1):12-18. http://jesoc.com/wp-content/uploads/2016/03/KC3_35.pdf
23. Safitri A, Yuliana N, Alfian A, Taradipa E, Aryani AS. The Effectiveness of Online Learning: The Implementation of Hand Hygiene as a Covid19 Prevention of the Cognitive and Affective Capabilities of Nursing Students. *Indonesian Journal of STEM Education*. 2020;2(1):19-26. <https://journal.publication-center.com/index.php/ijse/article/view/114>
24. So S. Mobile Instant Messaging Support for Teaching and Learning in Higher Education. *The Internet and Higher Education*. 2016;31(1):32-42. <https://doi.org/10.1016/j.iheduc.2016.06.001>
25. Kumar V, Nanda P. Social Media in Higher Education. *International Journal of Information and Communication Technology Education (IJICTE)*. 2019;15(1):97-108. <https://doi.org/10.4018/ijicte.2019010107>
26. Kuntarto E. Keefektifan Model Pembelajaran Daring dalam Perkuliahan Bahasa Indonesia di Perguruan Tinggi. *Indonesian Language Education and Literature*. 2017;3(1):99-110. <http://www.syekh Nurjati.ac.id/jurnal/index.php/jeill/article/view/1820>
27. Milman NB. Distance Education. *In International Encyclopedia of the Social & Behavioral Sciences*. 2015;2(1):567-570. <https://doi.org/10.1016/B978-0-08-097086-8.92001-4>

28. Bower M, Dalgarno B, Kennedy GE, Lee MJ, Kenney J. Design and Implementation Factors in Blended Synchronous Learning Environments: Outcomes from a Cross-Case Analysis. *Computers & Education*. 2015;86(1):1-17. <https://doi.org/10.1016/j.compedu.2015.03.006>
29. Adhe KR. Pengembangan Media Pembelajaran Daring Matakuliah Kajian PAUD di Jurusan PG PAUD Fakultas Ilmu Pendidikan Universitas Negeri Surabaya. *JECCE (Journal of Early Childhood Care and Education)*. 2018;1(1):26-31. <https://doi.org/10.26555/jecce.v1i1.3>
30. Firman F, Rahayu S. Pembelajaran Online di Tengah Pandemi Covid19. *IJES*. 2020;2(2):81-89. <https://doi.org/10.31605/ijes.v2i2.659>
31. Uscher-Pines L, Schwartz HL, Ahmed F, Zheteyeva Y, Meza E, Uzivanin A. School Practices to Promote Social Distancing in K-12 Schools: Review of Influenza Pandemic Policies and Practices. *BMC Public Health*. 2018;18(1):1-13. <https://doi.org/10.1186/s12889-018-5302-3>
32. Khasanah DRA, Pramudibyanto H, Widuroyekti B. Pendidikan dalam Masa Pandemi Covid19. *Jurnal Sinestesia*. 2020;10(1): 41-48. <https://sinestesia.pustaka.my.id/journal/article/view/44>
33. Astuti P, Febrian F. Blended Learning Syarah: Bagaimana Penerapan dan Persepsi Mahasiswa. *Jurnal Gantang*. 2019;4(2):111-119. <https://doi.org/10.31629/jg.v4i2.1560>
34. Husamah. Pembelajaran Bauran (Blended Learning). Jakarta: Prestasi Pustaka; 2015
35. Pangondian RA, Santosa PI, Nugroho E. Faktor-Faktor yang Mempengaruhi Kesuksesan Pembelajaran Daring dalam Revolusi Industri 4.0. In *Seminar Nasional Teknologi Komputer & Sains (SAINTEKS)*. 2019;1(1):56-60. <https://www.prosiding.seminar-id.com/index.php/sainteks/article/view/122>
36. Panigrahi R, Srivastava PR, Sharma D. Online learning: Adoption, Continuance, and Learning Outcome—A Review of Literature. *International Journal of Information Management*. 2018;43(1): 1-14. <https://doi.org/10.1016/j.ijinfomgt.2018.05.005>
37. Mallinen S. Teacher Effectiveness and Online Learning - In book: Teaching & Learning Online. London: Routledge; 2018.
38. Sudjana. *Penilaian Hasil Proses Belajar Mengajar*. Bandung: PT. Remaja Rosdakarya; 2016.