# EVALUATION OF ONLINE LEARNING IN HIGHER EDUCATION DURING THE COVID-19 PANDEMIC: A REVIEW AND RECOMMENDATIONS

#### Wiwik Ariesta<sup>1</sup>, Mia Aina<sup>2</sup>, Uslan<sup>3</sup>, Shanti Kumbarasari<sup>4</sup>, Dyah Aminatun<sup>5</sup>, Mishbahuddin<sup>6</sup>

Lambung Mangkurat University<sup>1</sup> University of Jambi<sup>2</sup> Muhammadiyah University of Kupang<sup>3</sup> ATMI Industrial Polytechnic<sup>4</sup> Technocrat University of Indonesia<sup>5</sup> Regional Research and Development Planning Agency of Riau Province, Indonesia<sup>6</sup> **Emails** wiwik.ariesta@ulm.ac.id mia.aina@unja.ac.id uslanspd@gmail.com shanti\_kumbarasari@polinatmi.ac.id

dyah\_aminatun@teknokrat.ac.id mishbah din@htp.ac.id

# Abstract

As part of the consequences of the Covid-19 pandemic lockdown, schools and universities in Indonesia closed for almost a year. There has been tremendous growth in the availability of college and university courses taught entirely online during Covid-19 pandemic. Lecturers were confronted with the need to adapt to online teaching. This study aims to evaluate the implementation of online learning that has been implemented for more than two semesters in higher education in South Kalimantan province. This study used a qualitative method. The data analysis technique used descriptive analysis technique. The completion of the questionnaire was anonymous and voluntary. Online learning during the Covid-19 pandemic can prevent students and lecturers from spreading the corona virus. The result shows that distance learning is getting more understandable and accessible to students and lecturers. Information and communication technologies tools, lecturer competence such as their technological pedagogical knowledge, and lecturer education learning opportunities pertaining to digital teaching and learning are instrumental in adapting to online teaching during Covid-19 universities closures. We contend that the future success and viability of online coursework depends upon successfully addressing issues such as those raised in this study.

# **Keywords:**

Evaluation, Online Learning, Virtual Learning, Covid-19, Pandemic

## Introduction

The first case of Covid-19 transmission in Indonesia occurred in the city of Depok, West Java province. This was announced directly by the president of the Republic of Indonesia, Mr. Joko Widodo at the presidential palace, Jakarta city on March 2, 2020. Two Indonesian citizens (a mother and daughter) who were infected Covid-19 and suspected of contracting the corona virus after meeting Japanese citizens who came to Indonesia. Since then, the governments have taken certain policies in order to prevent the transmission of Covid-19 in Indonesia, including the Minister of Education and Culture, Republic of Indonesia who took a policy so that learning in schools and universities is carried out online. In March 2020, all the students started doing online learning to prevent transmission of Covid-19. The Ministry of Education and Culture has prepared a Home Learning program broadcast on TVRI every Monday to Friday with a total duration of three hours per day for the primary and secondary education levels. Meanwhile, to follow up on the President's direction, the Minister of Education and Culture directed all higher education leaders to stop academic activities, such as face-to-face lectures in order to avoid Covid-19 transmission in the campus. The Minister of Education and Culture also ordered all campuses to immediately take a policy regarding the learning process from home by utilizing existing learning technology. The education system was one of the sectors that had to move very quickly and adapt the learning process for both schools and universities to comprehensive online learning.

The Ministry of Education and Culture, Republic of Indonesia through the Directorate General of Higher Education provides their best service in implementing online-based learning in the Higher Education during the Covid-19 pandemic. The Directorate General of Higher Education has collaborated with Google by providing an online learning management system using the Google Classroom platform which can be accessed on the lecture page.kemdikbud.go.id by all universities in Indonesia for free. The Directorate General of Higher Education also invited all tertiary institutions in Indonesia to make optimal use of the learning system by participating in sharing online learning modules that can be accessed openly and for free by all students in Indonesia. The Directorate General of Higher Education conducts an evaluation every month to give appreciation for lecturers and universities who share the most modules, as well as modules that are most accessed by students.

The learning model in higher education has begun to adapt through online learning. According to Pavel, Fruth & Neacsu (2015), technological literary is one of the required skills in the current knowledge-based society and ICT and e-learning have a great impact on the educational processes and systems, researches and learning initiatives, especially within higher education institutions. Online learning is carried out as a strategic choice in deciding the spread of the Covid-19 outbreak in the universities. Online learning allows learning to be carried out without meeting physical and distant, (Henderson, 2003) by using a good internet connection, (Clark, R. C. & Mayer, 2003).

In the higher education, especially in South Kalimantan, online learning is generally carried out using the learning management system (LMS) of each campus, but the lecturers have their own methods and innovations in teaching in their respective classes. One of the universities that has an LMS in South Kalimantan is Lamburg Mangkurat University, which has SIMARI as an integrated campus information system between all applications, so that it does not overlap which can be used by all students and lecturers to carry out various activities, including lectures (e-learning). An e-learning system already existed at Lambung Mangkurat University before the Covid19 pandemic. The online learning system was developed by Lambung Mangkurat University to facilitate the needs of the people for higher education services in realizing the Industrial Revolution 4.0 which focuses on technology-based learning. E-learning in SIMARI ULM has some tools in it, where lecturers can make worksheets for their students, upload the books, articles and teaching materials, making quizzes like using a computer based and can be evaluated through the system itself. The lecturers can use video conferencing by utilizing the google meet or zoom application which is integrated in one system if they want to see their students' faces during the learning process or exams. SIMARI can create a virtual learning environment. The use of online learning systems is one effort that can be made to overcome learning problems and make it easier for students to access lecture materials, communicate and discuss online, and obtain tutorial sharing assistance by lecturers on online learning system media.

In the National Education Webinar on July 21, 2020, Hetifah (2020) concluded that there are some problems of the implementation of online learning in Indonesia, such as; (1) lack of internet access; (2) there is not enough devices for online learning; (3) in some areas, the network is unstable; (4) lack of understanding and teacher readiness in distance learning methods; (5) difficulties of parents in assisting their children for learning activities, (7) the high cost of the internet.

The solutions that have been given by the government in overcoming obstacles to online learning include; (1) flexibility in the use of BOS funds and operational funds to subsidize the internet for underprivileged teachers and students; (2) coordination with cellular providers to provide cheap / free access to learning activities; (3) relaxation of taxes and electricity subsidies for schools; (4) loosening the regulations for the use of BOS funds, which previously could not exceed 50% for teacher salaries; (5) optimizing TVRI and RRI in disseminating learning content (Hetifah, 2020).

At the end of 2020, the mayor of Banjarmasin, Ibnu Sina said that Banjarmasin were not ready for offline learning. It is because several areas in Banjarmasin were still in the red zone status. Previously, the Minister of Education and Culture, Republic of Indonesia, Mr. Nadiem Makarim statedd that face-to-face learning will be carried out in the green zone at the high schools, middle school, and last elementary schools. However, boarding schools and madrasah in the green zone must continue to study from home and are prohibited to open dormitories and do the face-to-face learning during the transition period (the first two months). In Higher Education, the online learning will be continued for theoretical courses. Meanwhile, practical courses should be conducted online wherever possible. However, if it cannot be carried out online, the course is directed to be conducted at the end of the semester. Activities that cannot be replaced to online learning are laboratory research for theses and dissertations as well as laboratory assignments, practicums, studios, workshops, and similar academic / vocational activities.

Dr. Kasypul Anwar said that a teacher is hard to replace at any time, especially by technology. In face-to-face learning in the classroom, students get values that cannot be obtained through online learning, including social, cultural, ethical, and moral maturation processes that can only be obtained by interacting socially in the school environment. For this reason, since the new normal era in July 2020 to early January 2021, the central and local governments have continued to make efforts so that face-to-face learning can be carried out immediately by paying attention to certain conditions. Education Policies in the New Normal Era that have been planned by the Indonesian government include: (a) areas in the yellow, orange, and red zones are prohibited from

conducting face-to-face learning in educational units; (b) schools in the green zone may carry out face-to-face learning with very strict health protocols and layered requirements; (c) school opening is carried out in stages, starting from high schools, middle schools, and last primary schools; (d) The learning method in all zones must be implemented online for theory courses. For practical courses, if they cannot be carried out online, they are directed to be done at the end of the semester; (e) Higher education leaders in all zones can only allow student activities on campus with the health protocols (Hetifah, 2020).

Minister of Education and Culture, Republic of Indonesia, Mr. Nadiem Makarim said that face-to-face learning could be carried out when Covid19 vaccination for educators could be completed in June 2021. Head of the Education and Culture Office of South Kalimantan province, Mr. M. Yusuf Effendi does not want to make a decision at this time because according to him, faceto-face learning in the Covid-19 pandemic requires good preparation. Head of South Kalimantan Health Office, Mr. M. Muslim said that as many as 18,356 public service officers such as the armies, police, ASN, educators and others were registered as recipients of the corona virus vaccine. The Provincial Government of South Kalimantan launched a mobile vaccine system to provide fast service.

One of the most important goals of higher education is to achieve the highest possible quality of education. It does not consider the costs (energy, labor, financial resources), but only the achievement of the goal. The higher the degree of achievement of a goal is, the more effective the actions and activities are (Halachev, 2012). The quality of e-learning is the quality of the learning process itself, its management and the professional realization of the learners. Quality is the degree to which a set of inherent characteristics meets the requirements.

The success of online learning depends on several factors, such as the ability of students to use IT, learning objectives, infrastructure owned and so on. Students have more control over their studies and have more opportunities at their disposal for reflection. Successful students in online learning tend to be organized and are self-starters who can accomplish their work without close supervision (Picciano, 2017; Wang, Pi & Hu, 2019).

Evaluation is a part of the implementation in activities or programs for ensuring the objectives are in accordance with standards, (Stufflebeam and Shinfield, 1985); (G.F., Madaus., M.S. Scriven., And D.L., 1993); and (Gronlund, N. E., & Robert, 1991). Evaluation of online learning has been the subject of study for decades, analyzing not only learning but also teaching. There are many organizations such as British quality Assurance Agency, Norwegian Association for Distance Education and Flexible Education, Council for Higher Education Accreditation, European Association of Distance Learning, International Network for Quality Assurance Agencies in Higher Education, European Foundation for Quality in e-learning, UNESCO, that develop systems, standards and methods for assessing the quality of e-learning, distance, web-based and mobile learning in higher education.

The purpose of this study is to evaluate the implementation of online learning in higher education in South Kalimantan. Evaluation of the online learning system is carried out to improve the quality of learning. The research sample was 100 students, the research instrument used was an open questionnaire with survey techniques using google form. Furthermore, the data obtained were analyzed descriptively qualitatively. The type of data used in the evaluation of online learning systems was primary data, the data is directly obtained from the research subject. This study used a program evaluation research model. This research includes research that produces recommendations for improvement of a program, (Stufflebeam and Shinfield, 1985); and (G.F, Madaus., M.S Scriven., and D.L, 1993). The research is focused on explaining the online learning system program during the Covid-19 pandemic.

## **Results and Discussion**

A total of 100 respondents answered my survey questionnaire using google form.

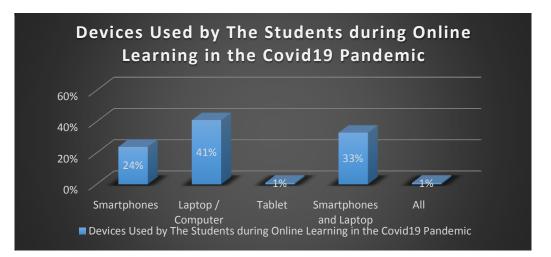


Figure 1. There are 41% students using laptops / computers and 24% of students using smartphones to take part in online learning during the Covid-19 pandemic. There are 33% students using both smartphones and laptops to study online, 1% of students use tablets and 1% use all devices.

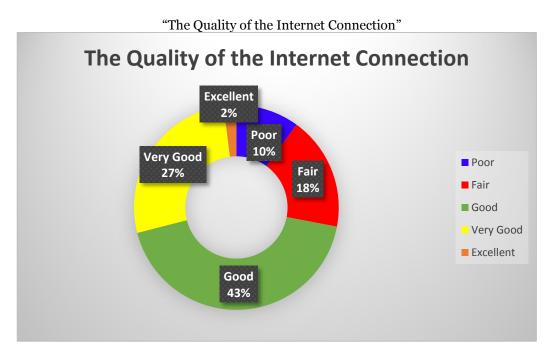


Figure 2. There are 43% of students stated that the quality of the internet connection is good, 27% of students stated that the quality of the internet connection is very good, 18% of students stated that the quality of the internet connection is fair, 10% of students stated that the quality of the internet connection is fair, 10% of students stated that the quality of the internet connection is poor, 2% of students stated that the quality of the internet connection is excellent.

"Platforms used for Online Learning during the Covid-19 Pandemic"

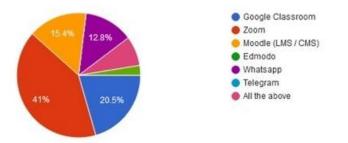
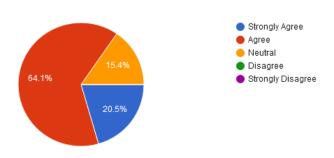
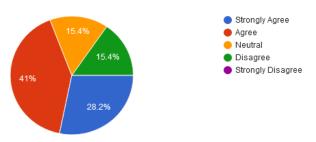


Figure 3. There are 41% of students stated that they use the zoom application during online learning, 20.5% of students stated that they use google classrooms during online learning, 15.4% of students stated that they use Moodle (LMS / CMS) during online learning, 12.8% of students stated that they use WhatsApp during online learning, the rest stated that they use all platforms in online learning during the Covid-19 pandemic.



"Online learning platform is easy to access".

Figure 4. There are 64.1% of students agree that online learning platforms are easy to access, 20.5% of students strongly agree that online learning platforms are easy to access, 15.4% of students are neutral.



"The online platforms used by the lecturer is easy to use"

Figure 5. There are 41% of students agree that the online platforms used by the lecturer are easy to use, there are 28.2% of students strongly agree that the online platforms used by the lecturer are easy to use, there are 15.4% of students disagree that the online platforms used by the lecturer are easy to use, the rest of the students are neutral.

"Online learning is reliable and free from error".

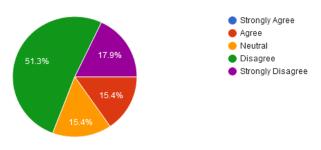


Figure 6. There are 51.3% of students disagree that online learning is reliable and free from error, there are 17.9% of students strongly disagree that online learning is reliable and free from error, there are 15.4% of students agree that online learning is reliable and free from error, the rest are neutral.

"Online learning allows for a quick response".

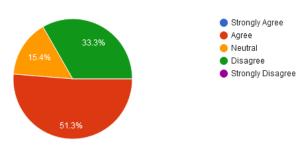


Figure 7. There are 51.3% of students agree that online learning allows for a quick response, 33.3% of students disagree that online learning allows for a quick response, the rest stated that they are neutral.

"The lecturer is passionate and enthusiastic about online teaching".

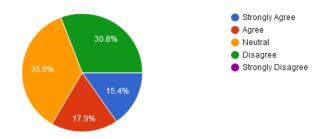


Figure 8. There are 30.8% of students disagree that the lecturer is passionate and enthusiastic about online teaching, there are 17.9% of students agree that the lecturer is passionate and enthusiastic about online teaching, there are 15.4% of students strongly agree that the lecturer is passionate and enthusiastic about online teaching, the rest are neutral (35.9%).

"The lecturer is well prepared for online classes".

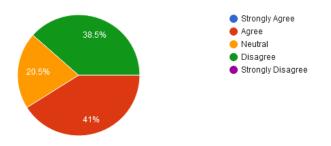


Figure 9. There are 41% of students agree that the lecturer is well prepared for online classes, 38.5% of students disagree that the lecturer is well prepared for online classes, the rest are neutral (20.5%).

"The lecturer communicates and presents the material in a way that is easy to learn".

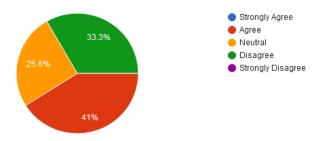


Figure 10. There are 41% of students agree that the lecturer communicates and presents the material in a way that is easy to learn, there are 33.3% of students disagree that the lecturer communicates and presents the material in a way that is easy to learn, the rest are neutral (25.6%).

"It is easy to learn through online learning".

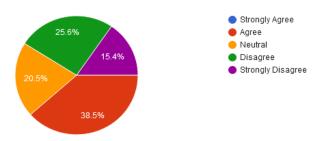


Figure 11. There are 38.5% students agree that it is easy to learn through online learning, there are 25.6% students disagree and 15.4% students strongly disagree that it is easy to learn through online learning, the rest are neutral (20, 5%).

"Online learning enables me to communicate easily with my friends".

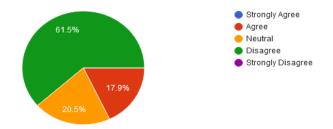
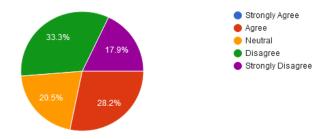


Figure 12. There are 61.5% of students disagree that online learning enables them to communicate easily with their friends, there are 17.9% of students agree that online learning enables them to communicate easily with their friends, the rest are neutral (20.5%).



"I find myself score much better in face-to-face courses than online courses"

Figure 13. There are 33,3% students disagree and 17,9% students strongly disagree that they find theirselves score much better in face-to-face courses than online courses, 28,2% students agree that they find theirselves score much better in face-to-face courses than online courses, the rest are neutral (20,5%).

"I would prefer online learning than face-to-face learning".

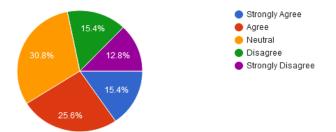
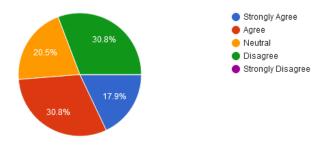


Figure 14. There are 25.6% students agree and 15.4% students strongly agree that they would prefer online learning than face-to-face learning, there are 15.4% students disagree and 12.8% students strongly disagree that they would prefer online learning than face-to-face learning, the rest are neutral (30.8%).



"I find myself score well in my exams through online learning"

Figure 15. There are 30.8% of students agree and disagree that they find theirselves scores well in their exams through online learning, there are 17.9% of students strongly agree that they find theirselves scores well in their exams through online learning, 20.5% of students are neutral.

"I find myself learned better through online learning".

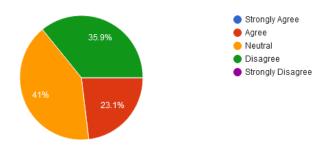
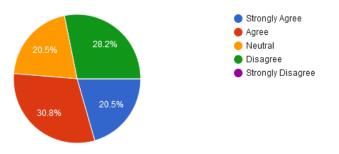


Figure 16. There are 35.9% students disagree that they find theirselves learned better through online learning, 23.1% of students agree that they found theirselves learned better through online learning, the rest are neutral (41%).



"I am confident that I can learn well through face-to-face rather than online learning".

Figure 17. There are 30.8% of students agree that they are confident learning well through face-to-face rather than online learning, 28.2% of students disagree that they are confident learning well through face-to-face rather than online learning, 20.5% of students strongly agree and are neutral that they are confident learning well through face-to-face rather than online learning.

"Online learning is flexible and effective".

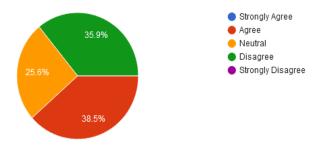


Figure 18. There are 38.5% of students agree that online learning is flexible and effective, 35.9% of students disagree that online learning is flexible and effective, the rest are neutral (25.6%).

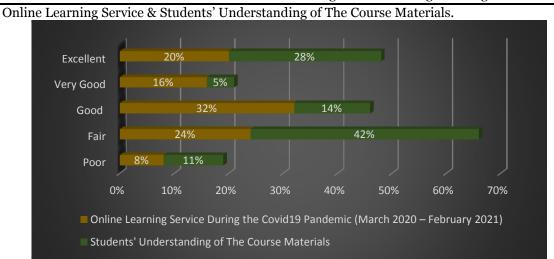


Figure 19. There are 32% of students stated that online learning service during the Covid-19 pandemic is good, 24% of students stated that online learning service during the Covid-19 pandemic is fair, 20% of students stated that online learning service during the Covid-19 pandemic is excellent, there are 16 % of students stated that online learning service during the Covid-19 pandemic is very good, 8% of students stated that online learning service during the Covid-19 pandemic is poor. There are 42% of students stated that student's understanding of the course materials is fair, 28% of students stated that student's understanding of the course materials is excellent, 14% of students stated that student's understanding of the course materials is good, 11% of students stated that student's understanding of the course materials is poor, there are 5% of students stated that student's understanding of the course materials is poor.

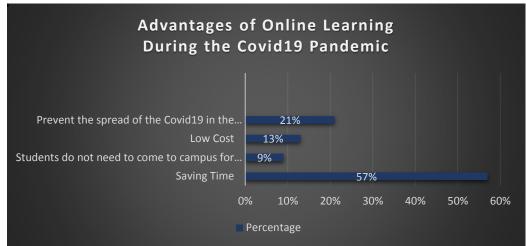


Figure 20. There are 57% of students stated that online learning is saving their time, 21% of students stated that online learning prevents the spread of the Covid-19, there are 13% of students stated that online learning is low cost, there are 9% of students stated that students do not need to come to campus for the lectures.

Students use laptops / computers and smartphones to take part in online learning during the Covid-19 pandemic. On average, students can take online learning using their own devices. Most of the students stated that their internet connection is good, although 10% of students stated that their internet connection is poor. However, the Ministry of Education and Culture, Republic of Indonesia has provided internet assistance to students, as well as teachers and lecturers to conduct online learning during the Covid-19 pandemic.

The lecturers use Zoom application (41%) and the rest use Google Classroom, Moodle and Whatsapp for online learning during the Covid19 pandemic. The use of various platforms and different web-based courses offer an innovative teaching method which increases students' participation, motivation and enhances their interest towards the particular subject (Doncheva, 2015). Students agree that online learning platforms are easy to access. There are almost no obstacles for students in accessing the platforms used by lecturers during online learning.

Most of the students stated that the online platforms used by the lecturer are easy to use, although there are 15.4% of students stated that the online platforms used by the lecturer are not easy to use. There are 32% of students stated that online learning service during the Covid-19

pandemic is good and 57% of students stated that online learning is saving their time. In some cases, lecturers use more than one platform in online learning to anticipate the diverse needs of students. Students stated that online learning is not reliable and free from error and there are 33.3% of students stated that online learning does not allow for a quick response. Sometimes students face problems uploading papers or downloading files on the e-learning system or platforms used by lecturers, so lecturers are advised to always be prepared and have other alternatives to help their students.

There are 30.8% of students stated that the lecturer is not passionate and enthusiastic about online teaching and 38.5% of students stated that the lecturer is not well prepared for online classes. This is due to limited interactions between students and lecturers during online learning. The lecturers often change class schedules for certain conditions, so that students tend to be unfocused, and there are even students who do not pay attention to lecturers when online learning takes place. There are 41% of students stated that the lecturer communicates and presents the material in a way that is easy to learn. Most students also stated that online learning does not enable them to communicate easily with their friends. This should be a concern and evaluation for lecturers in order to overcome various problems that exist, especially in terms of communication with students during online learning.

There are 38.5% of students agree that it is easy to learn through online learning and 11% of students stated that their understanding of the course materials is poor. There are 33.3% of students stated that they find theirselves scores much better in face-to-face courses than online courses and 30.8% of students found theirselves scores well in their exams through online learning. There are 25.6% of students stated that they would prefer online learning than face-to-face learning. There are 35.9% of students stated that they do not find theirselves learned better through online learning. There are 30.8% of students stated that they are confident learning well through face-to-face rather than online learning. There are 38.5% of students stated that online learning is flexible and effective. These things show that each student has different needs in learning, there are some students who like online learning and there are also students who prefer face-to-face learning. Lecturers must have online learning strategies that are suitable for every student, so that online learning can be done even better.

Learning online is the best solution in preventing the spread of Covid-19 in higher education (Amin, 2020). Even so, online learning must continue to be monitored and evaluated so that students still get their right to obtain quality knowledge from their lecturers. A comprehensive evaluation becomes a reference in education services in the community (Yudiawan, 2018).

## **Conclusions and Recommendations**

Universities need to monitor and evaluate the online learning during the Covid-19 pandemic. Quite a small number of lecturers were able to conduct online video lectures during the course period in a completely online environment. Most of them used a mixed model, sending materials, work assignments and less video communication. In conclusion, it could be summarized that the factors influencing the evaluation of efficiency are several and they are all signifcant and of particular importance. There is a need the communication in the online environment, especially through online video conferencing applications with many participants to be improved. Such integration into a learning platform creates a prerequisite for creating a convenient, easy and with many functional possibilities for work and study online platform for distance learning. Online learning will be more common and preferred, not only by students but also by lecturers themselves. The experience and confidence that lecturers have generated in these few months is signifcant and it would not be good to lose this accumulated experience, but rather to develop it to wider horizons, with or without a pandemic.

## References

- 1. Amin, K. (2020). Upaya Pencegahan Penyebaran Covid-19 (Corona) di Lingkungan Perguruan Tinggi Keagamaan Islam.
- 2. Clark, R. C. & Mayer, R. E. (2003). *E-Learning and the Science of Instruction*. ossey Bass/Pfeiffer.
- 3. Doncheva, L. (2015). An implementation of a hybrid form of education in foreign language acquisition. Activities in Physical education and Sport. International Journal of Scientific and Professional Issues in Physical Education and Sport. Vol. 5.
- 4. G.F, Madaus., M.S Scriven., and D.L, S. (1993). *Evaluation Models, View Points on Educational and Human Services Evaluation*. Kluwer-Nijhoff Publishing.
- 5. Gronlund, N. E., & Robert, L. L. (1991). *Educational Assessment and Reporting*. Harcout Brace Javanovich Publisher.
- 6. Halachev, P. (2012). Predicting the Effectiveness of e-Learning by Neural
- 7. Networks. Cybernetics and Information Technologies, Vol. 12, No 2.
- 8. Henderson. (2003). The E-Learning Question and Answer Book. American

novateurpublication.com

- 9. Management Association.
- 10. Hetifah. (2020). Evaluasi Pembelajaran Jarak Jauh. Webinar Nasional
- 11. Pendidikan dalam new normal. Jakarta: DPR RI.
- 12. Pavel, A., Fruth, A. & Neacsu, M. (2015). ICT and E-Learning Catalysts
- 13. for Innovation and Quality in Higher Education. Retrieved February 20,2021, from https://www.sciencedirect.com/science/article/pii/ S2212567115004098
- 14. Stufflebeam dan Shinfield. (1985). Systematic Evaluation. Kluwer
- 15. Nijhof Publishing.
- 16. Sugiyono. (2017). Metode Penelitian Kuantitatif, Kualitatif, Dan R&D
- 17. (25th ed.). CV. Alfabeta.
- 18. Wang, H., Pi, Z. & Hu, W. (2019). The instructor's gaze guidance in
- 19. Video lectures improves learning. Journal of Computer Assisted
- 20. Learning, 35(1), 42 50. https://doi.org/10.1111/jcal.12309
- 21. Yudiawan, A. (2018). Relevansi Kepemimpinan , Supervisi dan Kinerja
- 22. pada Lembaga Pendidikan Pendahuluan. *Al-Riwayah: Jurnal Kependidikan,10*(April),268–286. http://ejournal.stain.sorong.ac.id/indeks.php/al-riwayah

#### BIOGRAPHY



Wiwik Ariesta was born in Palembang, Indonesia on May 20, 1989. The author is a lecturer in Ministry of Education and Culture, Republic of Indonesia. She graduated from Elementary School 162 of Palembang in 2000, Junior High School 16 of Palembang in 2003, and Senior High School YKPP I of Palembang in 2006. The author graduated with a Bachelor of Education at Sriwijaya University of Indralaya and postgraduated degree in Educational Technology.

#### BIOGRAPHY



Mia Aina was born on January 23th, 1980 in Sungai Penuh, Kerinci. She finished her elementary and secondary education in SDN 5 Sungai Penuh, Kerinci, Jambi Province (1991), SMPN 2 Sungai Penuh (1994), and SMAK Padang, West Sumatera. The Youngest daughter of H.Faruk Husin and Almh. Hj. Ratni Binti Makmur. She continued her study at Jambi University (UNJA), majoring in Biology Education. She is a lecturer at the University of Jambi in the Biology Education Study Program FKIP Jambi University. She got married with Ir.Amhar and got two boys, they are Habli Armi Fauzul Akbar and Qiyan Al Mahdi. Then she continued to postgraduate at Jambi University in the Science Education Technology Study Program (2008 -2012). Some of her experiences in teaching Biologi and Chemistry are at SMAN 3 Rawang, Sungai Penuh, SMAN 1 Sungai Penuh (2003 - 2005). Teaching at Biologi Education Study Program, ICT for Biology Learning, Biology Learning Media, Biochemistry, Student Development, Learning Teory , Learn and Learning (2010 -2021). Now, she continues her study at Doctoral Education Program at Jambi University. Her emails are mia.aina@unja.ac.id and miaaina63@gmail.com

#### BIOGRAPHY



Uslan was born on October 10th, 1982 in Arubara, Ende, East Nusa Tenggara. He finished his primary school in 1994 at SDN Roja 3 Arubara, Ende. After attending middle school in MTs Negeri Ende in 1997, he continued his study in SMA Negeri 2 Kota Kupang in 2000. Afterwards, he completing his undergraduate study in Biology Education Study Program of Universitas Muhammadiyah Kupang in Kupang City. In 2013, he continued his graduate study and obtain the Master of Biological Science at Universitas Udayana, Denpasar in 2015. He teaches Basic Science Concept (Biology) and Primary School Natural Science Learning in Primary School Teacher Education Study Program, Universitas Muhammadiyah Kupang.

#### BIOGRAPHY



BIOGRAPHY



Shanti Kumbarasari was born in Blora, Indonesia on , May 26, 1979. The author is a lecturer in ATMI Industrial Polytechnic. She has a Bachelor's Degree in the Manufacturing Mechanical Engineering Department from the Sanata Dharma University and a Master's Degree in the Manufacturing Mechanical Engineering Department from the Pancasila University. Her email is shanti\_kumbarasari@polinatmi.ac.id.

Dyah Aminatun is a lecturer in Universitas Teknokrat Indonesia with English Education as her background study. She got her bachelor degree from Syarif Hidayatullah, Stated Islamic University, Jakarta and completed her master degree at Sebelas Maret University, Solo. She has written some researches that have been published in national journals and been presented in national & international conferences. Her research interests mostly focus on teaching media, ICT, and Teaching English as a Foreign Language. In 2019, her research was funded by Ministry of Research, Technology, and Higher Education for the program of Penelitian Dosen Pemula (PDP). Currently, she is actively teaching some subjects related to English education and TEFL in Faculty of Arts and Education, Universitas Teknokrat Indonesia while also writing book and articles

#### BIOGRAPHY



Mishbahuddin is a lecturer and researcher of Regional Research and Development Planning Agency of Riau Province, Indonesia. The author has a formal and non-formal educational background in the fields of Health, Education and Sports. He has an Associate's Degree of Hospital Education, Faculty of Medicine, University of Indonesia and an Associate's Degree in English Department at the LPI Jakarta College of Foreign Language Academy. He has a Bachelor's Degree in Health Service Management, Faculty of Public Health, University of Indonesia, Jakarta. He has a Master's Degree in the Hospital Management Department at the University of Leeds, England (United Kingdom) and a Master's Degree in the Educational Administration Department at the University of Riau. He attended the Public Health Promotion Course of the Singapore Government in 2019 and Taekwondo Coach Training Program course of Kyung Hee University, South Korea in 2012. He served as Deputy Chair III for Student Affairs and Head of the Health Information Recording Study Program, he is a manager of the Badnur Medisa Martial Arts School in Riau Province. He wrote several articles and books on Health and Education. Two books that have been published are "Increasing Student Motivation to Write" and "Improving the Hospital Health Service Management". His email is mishbah\_din@htp.ac.id.