Problems with the Policy Implementation of Learning Management During the COVID-19 Pandemic in Indonesia: A Retrospective Analysis for Post-Pandemic Policy

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Abstract: This study aimed to describe the results of research related to problems in the implementation of online learning policies during the COVID-19 pandemic and what the recommendations of researchers are for post-pandemic learning policies. This study used a qualitative approach with the documentation method as the data collector. The source of this research data comes from the publication of research results in the ERIC library and was indexed by Scopus for the period 2020–2021 (during the COVID-19 pandemic). The results of the study indicated that the aspects that were problematic in the implementation of online learning policies included: (a) pedagogic competence and technology mastery of educators; (b) student readiness and ability; (c) education stakeholder support; and (d) supporting facilities and infrastructure. So, to optimize the results and quality of learning during the COVID-19 Pandemic, it is necessary to take the following post-pandemic policy: (a) increasing the capacity of educators (in designing and mastering technology); (b) optimizing the support of educational stakeholders through socialization; (c) equitable distribution of student readiness in distance learning; and (d) improvement of supporting facilities and infrastructure.
Keywords: online learning policies, policy problems, policy recommendations, the covid-19 pandemic, education in Indonesia.

Starting from the outbreak of the COVID-19 virus in Wuhan, China, at the end of 2019 and infecting all corners of the world, it has brought a new round of uncertainty in various sectors, such as the economy, tourism, education, and other sectors. In the education sector in Indonesia, the lockdown, social distancing, and PPKM (community activity restriction program) policies have an impact on the prohibition of schools or educational institutions from carrying out teaching and learning activities in schools. PPKM is a policy taken by the government and contained in government regulation number 21 of 2020, which regulates large-scale social restrictions in the context of accelerating the handling of the coronavirus disease in 2019. Indonesia's school closure policy during the COVID-19 pandemic has left 45.5 million school students and 3.1 million teachers dependent on online teaching and learning (Almanthari et al., 2020; Daud, 2020). Based on the results of the study by Sueca et al. (2021), it was concluded that COVID-19 had a serious impact on high levels of stress, insomnia, anxiety, and depression. This condition can increase the gap in student achievement between the economically capable and the less fortunate compared to the period before the pandemic (Bailey et al., 2021).

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In August 2021, there was a spike in positive cases of COVID-19 with the emergence of the Delta variant. This condition makes the government take the PPKM policy in several stages (Sahara, 2021). So, schools or other educational institutions have not been able to hold face-to-face learning. Such a policy will have an impact on the quality of learning. The teacher's unpreparedness in designing online learning further exacerbates this condition (Suharwoto, 2020). Based on reports from several remote areas in Indonesia, such as the province of Central Sulawesi, the problems were: (a) bad internet signal or network; (b) students who did not know how to use technology; (c) students did not have mobile phones due to economic limitations; and (d) a lack of adequate facilities in the online learning process (Kasdiah, 2020). This condition had an impact on the ineffectiveness of online learning during the COVID-19 pandemic.

The ineffectiveness of online learning implementation during COVID-19 has been discussed by several researchers. Baety and Munandar's (2021) indicated that the ineffectiveness of the carrying capacity of students' access to online learning support facilities was influenced by economic factors (38%), social factors (30%), health factors (19%), and personality factors (13%). Ineffective online learning also occurred at the elementary school level due to the lack of maximum preparation in regulations for online teaching and learning, implementation in the field, and student readiness. Online learning during the COVID-19 pandemic has been able to replaced offline learning, but in terms of effectiveness, it was unable to achieve learning objectives (Damayanthi, 2020).

The uncertainty of government policies, which depend on the development of the COVID-19 situation, made it difficult for education policy actors at the implementation level to plan appropriately and measurably. This condition caused the quality of the learning process and the quality output of educational programs to be compromised. Therefore, it was important to conduct an in-depth analysis of government policies, especially on learning management. The research question guiding this study was: What problems were found in the implementation of online learning policies during the COVID-19 pandemic at the elementary and secondary school level and higher education in Indonesia?

A Literature Review

The Online Learning Policy during the COVID-19 Pandemic in Indonesia

The online learning policy during the COVID-19 pandemic is based on the massive increase in the spread of the virus. This condition gave rise to demands from various elements of society for the Indonesian government to establish policies to prevent the spread of the virus (Detiknews, 2020). The policy reaped the pros and cons of various groups of people, some of whom agreed to lock down and some who held the view of social restrictions or other forms (Rosana, 2020).

The government responded to various demands from the community by issuing Government Regulation No. 21 of 2020 (Government Regulation Regarding Large-Scale Social Restrictions in the Context of Accelerating the Handling of Corona Virus Disease 2019 (COVID-19), 2020) concerning large-scale social restrictions in the context of handling Corona Virus Disease (COVID-19). A detailed explanation of this regulation is contained in Article 4 Point A, which explains that school and office holidays are one form of large-scale social restrictions. Furthermore, in Article 4 Section 1, explained that restrictions on school activities (school holidays) must still take into account the needs of education (education services).

The implementation of education during the pandemic is carried out online in various forms and models. The Ministry of Education and Culture through circular letter number 4 of 2020 (Minister of Education and Culture Circular Letter: Implementation of Education Policy

in the Emergency Period of the Spread of COVID-19, 2020) related to the provisions of the learning process from home, among others:

- Online or distance learning was done from home to provide a meaningful learning experience for students without the burden of completing all curriculum achievements for grade promotion and graduation.
- Home learning could focus on life skills education, including the COVID-19 pandemic.
- Learning from Home: learning activities and tasks may vary between students, according to their individual interests and conditions, including considering the gap in access/facilities for learning at home;
- Evidence or products of the Learning from Home activity are given qualitative and useful feedback from the teacher without being required to give a score or quantitative value.

The government, through the Ministry of Education and Culture, collaborated with 12 learning platforms to support online learning, including *rumah belajar*, *meja kita*, icado, *IndonesiaX*, Google for Education, *kelas pintar* (smart class), Microsoft Office 365, *Ruangguru*, *Sekolahmu*, Zenius, and Cisco WebEx (Adit, 2020). Assidiqi and Sumarni (2020), at the beginning of the pandemic, found that most elementary school teachers used the WhatsApp group, Google facilities (Google Classroom, Google Form, and Google Meet), and Zoom Cloud Meeting to support online learning. Meanwhile, Imam Makruf et al. (2022) it was concluded that apart from using the Moodle platform, lecturers used Zoom and Google Meet for synchronous learning and Google Classroom and WhatsApp for asynchronous learning.

After the decrease in the number of COVID-19 cases and an increase in the number of people who have received vaccinations, the government, through a joint decision of the Minister of Education and Culture, the Minister of Religion, the Minister of Health, and the Minister of Home Affairs dated December 21, 2021, decided that learning would be carried out in two forms: (a) limited face-to-face learning with the implementation of the health protocol; and (b) distance learning. However, parents could choose to include their children in face-to-face learning or distance learning (online learning) (Kemendikbud, 2020).

The implementation of learning policies during the pandemic needed to be studied or evaluated comprehensively for policy formulation in the post-pandemic. The significance of this study's results for policymakers and analysts is to use retrospective or other approaches to aid in the formulation of appropriate policies.

Retrospective Analysis for Post Pandemic Learning

Research in public policy plays a role in the success of education in both normal and abnormal conditions (as it is today). Policy analysis has an important role in providing philosophical and empirical studies related to education policy. Policy analysis is a form of analysis that produces and presents information that can be used as a basis for policymakers in making decisions (Dunn, 2017). This analysis includes a study of the underlying social problems and offers practical alternatives to solve them. Information and policy alternatives to solve problems related to learning management during the pandemic can support leaders and policymakers with various facts to make rational decisions on how best to overcome these problems (Alexander, 2013).

Rapid changes in conditions or situations during a pandemic have made it difficult for policymakers and policy analysts to predict the possibility or impact that policies might have. This research focuses on policies, which means that policy analysis is carried out by monitoring and evaluating the policy's problems, otherwise known as ex-post analysis (Patton & Sawicki,

1993; Patton et al., 2016). The analysis of this model is called by William Dunn (2017, p. 10) "retrospective policy analysis." This retrospective policy analysis process focused on the implementation or outcome of the policy.

Dunn (2017) argued that the policy analysis process consists of four main actions: forecasting, prescribing, monitoring, and evaluation. The four stages in the integrated study of the W. Dunn model started from a retrospective study to a prospective study. In the retrospective study, data in the form of research articles on the study of policy implementation was collected, which contained these two elements. The prospective review of each research article was taken from the policy recommendations suggested by the researcher. Based on this fact-based study, it could strengthen understanding of learning management policies during a pandemic.

As stated by Weimer and Vining (2011), the first step in the policy analysis process is to collect information. Researchers or policy analysts seeking relevant information can conduct a literature review on the publication of research results. In line with that, this study analyses various research results to find educational policy solutions (related to learning management) that are responsive to the demands of the times.

Methodology

This study uses a qualitative approach, which is included in the type of content or document analysis. The data for this study was gathered using internet-based search engines. The data search was focused on research results related to the implementation of learning management policies in educational institutions during the COVID-19 pandemic. Referring to the opinion of Ary et al. (2010), the research data was traced through a special online library (indexer) for educational research, namely ERIC (the Information Center for Educational Resources).

In ensuring the quality of the data sources, the data for this research is limited to only articles published in internationally reputable journals indexed by Scopus, which are then checked for levels in Scimago Journal Rank (Q1, Q2, Q3, and Q4). In addition, this research data is also limited to articles published in the 2020-2021 period, namely during the COVID-19 outbreak in Indonesia. Data analysis refers to the stages developed by Miles et al. (2014), namely: (a) data condensation (the process of selecting, focusing, simplifying, abstracting, and/or transforming data); (b) data display (organizing data to draw conclusions); and (c) drawing conclusions.

Results

This study refers to the concept of retrospective analysis, which focuses on policy evaluation. So, reviewing information related to whether learning policies during the pandemic had a positive impact or vice versa causes new problems, based on the analysis of the research domain, the basis for grouping the data was the level of formal education, namely, basic (elementary) education level, secondary education level, and higher education level, that is, the three levels of education in Indonesia. The data findings based on the screening of the articles referred in Table 1 are as follows:

Table 1

Data Sources

Research Article Title	Author Name	Source	Quartile
The perceptions of primary school teachers of online learning during the COVID-19 pandemic period: A case study in Indonesia	Aliyyah et al. (2020)	Journal of Ethnic and Cultural Studies	Q1
Assessing Verbal Positive Reinforcement of Teachers during School from Home in the Covid-19 Pandemic Era	Mantasiah, R. (2021)	International Journal of Instruction	Q2
Teachers' technology Integration and Distance Learning Adoption Amidst the Covid-19 Crisis: A Reflection for The Optimistic Future	Rahmadi, I. F. (2021)	Turkish Online Journal of Distance Education	Q2
Secondary school mathematics teachers' views on e-learning implementation barriers during the COVID-19 pandemic: The case of Indonesia	Almanthari et al. (2020)	Eurasia Journal of Mathematics, Science and Technology Education	Q2
Embarking digital learning due to COVID-19: Are teachers ready?	Aditya, D. S. (2021).	JOTSE: Journal of Technology and Science Education	Q3
A Quick Study on SRL Profiles of Online Learning Participants during the Anticipation of the Spread of COVID-19.	Sulisworo, D. et al. (2020).	International Journal of Evaluation and Research in Education	Q4
Students' opinions about studying from home during the COVID-19 pandemic in Indonesia.	Hermanto, H. et al. (2021).	Cypriot Journal of Educational Sciences	Q3
Indonesian university students' likes and dislikes about emergency remote learning during the COVID-19 pandemic.	Husni Rahiem, M. D. (2021).	Asian Journal of University Education (AJUE)	Q4
Developing Virtual Communication Skills in Online Learning Based on Modified PBL during the COVID-19 Pandemic.	Hikamah, S. R. (2021).	International Journal of Education and Practice	Q4
Assessing Undergraduate Students'e-Learning Competencies: A Case Study of Higher Education Context in Indonesia.	Martha, A. S. D., et. al. (2021).	Education Sciences	Q2
Adaptation to Emergency Remote Teaching: Pedagogical Strategy for Pre-Service Language Teachers Amid Covid-19 Pandemic.	Sumardi, S., & Nugrahani, D. (2021).	Turkish Online Journal of Distance Education	Q3
Factors affecting the adoption of e-learning in Indonesia: Lesson from Covid-19.	Siron, Y. et al. (2020).	JOTSE: Journal of Technology and Science Education	Q3

Problems with the Implementation of Online Learning Policies at the Elementary Education Level

Several studies related to the implementation of learning policies during the COVID-19 pandemic at the basic education level by Aliyyah et al. (2020) were published in the Journal of Ethnic and Cultural Studies (Scopus Q1), with research results showing the determinants of successful implementation of online learning policies during a pandemic. The important factors include: (a) readiness using technologies; and (b) collaboration of stakeholders, including the government, teachers, parents, and the community.

The second study conducted by Mantasiah (2021), published in the International Journal of Instruction (IJI) (Scopus Q2), focused on teachers. This study concludes that during home learning:

- Teachers tend to be less likely to provide verbal reinforcement to students.
- Teachers do not understand the importance of providing positive reinforcement during school from home.
- The teacher does not understand that verbal reinforcement can be delivered orally and in writing.
- Female teachers often provide more positive reinforcement than male teachers.

The research focused on teachers was also carried out by Rahmadi (2021) with a different perspective; the results were published in the Turkish Online Journal of Distance Education (Scopus Q2). This study focuses on the tools and applications used by teachers in online learning. The research findings showed that:

- Teachers tend to the applications that are used daily.
- Virtual classroom applications that use globally are preferred by teachers over local applications.
- Teachers have not integrated technology into the learning transformation.
- Teachers are prepared for distance learning when the policy is taken.

Based on the three research results above, we concluded that the implementation of learning policies during the COVID-19 pandemic in Indonesia has neither been maximized nor has not been effective due to the following factors:

- Learning to support technology.
- Cooperation of various interested parties.
- Teachers' understanding of the concept of implementing (strengthening) online learning.
- Application selection for learning support.
- Technology integration in learning.
- Maturation of teacher readiness in distance learning.

Problems with the Implementation of Online Learning Policies at the Secondary Education Level

The effect of implementing learning policies at the level of secondary education (junior and senior high schools) in Indonesia could be seen in several studies, such as that conducted by Almanthari et al. (2020) and published in the Eurasia Journal of Mathematics, Science, and Technology Education (Scopus Q2). His research focused on examining the relationship

between difficulties (barriers) experienced by students and the use of e-learning. Some resistance at the student level has an impact on the curriculum and school level barriers. This study explicitly tried to find obstacles to the use of e-learning during a pandemic to maximize learning outcomes (Almanthari et al., 2020).

Subsequent research by Aditya (2021), who tried to reveal the readiness of teachers and technological facilities, this result of the study was published in the Journal of Technology and Science Education (Scopus Q3) with the following conclusions:

- Teachers consider themselves (confident) psychologically, technologically, and pedagogically ready to carry out digital learning.
- Digital learning problems are mostly faced by teachers in rural areas.
- The problem of students' technology affordability.

In line with that, Sulisworo et al. (2020), in their research published in the International Journal of Evaluation and Research in Education (Scopus Q4), showed that students in Indonesia still need assistance from teachers to improve SRL (Self-Regulated Learning). So, the teacher's role guiding students in learning (SRL Learning) was needed during the COVID-19 pandemic to support student learning (Sulisworo et al., 2020). Based on the research above, the implementation of learning policies at the secondary education level faced the following problems:

- The problem of digital learning is experienced by teachers who teach in rural areas.
- Access to technology is an obstacle for students.
- Students need teacher guidance in digital-based learning.

Problems with the Implementation of Online Learning Policies at the Higher Education Level

Universities, as educational institutions, carry out the main tasks of education, research, and community service; therefore, many studies or research related to the implementation of learning during a pandemic. The research conducted by Hermanto et al. (2021) and published in the Cypriot Journal of Educational Sciences (Scopus Q3) research that analyzed the students' responses at the *Institut Teknologi Sepuluh November Surabaya* (ITS) on their experiences related to learning. Based on the results, as many as 52.5% of students did not like studying at home, and 92.5% believed that traditional methods contributed more to the knowledge they gained in lectures (Hermanto et al., 2021).

Husni Rahiem (2021), published research in the Asian Journal of University Education (Scopus Q4) and found three main problems in implementing learning policies during a pandemic, namely; (a) loss of structure, (b) technological difficulties, and (c) financial difficulties and barriers. In more detail, Yudiawan and Sunarso (2021) published research in the International Journal of Evaluation and Research in Education (Scopus Q4) that proved that the success of online learning was determined by the quality of infrastructure and systems (94.2%), while diversity and services had no significant effect (6.3%).

Hikamah (2021), in her research publication in the International Journal of Education and Practice (Scopus Q4), proved that using Zoom Meetings and WAG (WhatsApp Group) for face-to-face students could achieve communication skills. Related to student readiness, Martha et al. (2021), in the journal Education Sciences (Scopus Q2) proved that: (a) some students were not ready for online learning; and (b) the difference in student readiness in online learning was clear when analyzed based on academic year at university, the field of study, cultural level, e-

learning organization, university, gender, and region. Student readiness was evenly undistributed to do online learning (Martha et al., 2021).

From the point of view of lecturers as designers of distance learning during this pandemic, Sumardi and Nugrahani's (2021) research published in the Turkish Online Journal of Distance Education (Scopus Q3) showed that lecturers took a bigger role in their pedagogical control but did not understand virtual learning and LMS (Learning Management System). Meanwhile, from the point of view of students, Siron et al. (2020) found in their research published in the Journal of Technology and Science Education (Scopus Q3) that the perceived ease of use and perceived benefits of students determined their intention to use e-learning during this pandemic.

The studies above showed that the problems faced in the implementation of online learning included:

- Students did not like to study at home, and they believed that traditional learning was more beneficial than online learning.
- Loss of structure.
- Technological difficulties.
- Financial difficulties and obstacles.
- Infrastructure and systems.
- Students are not ready for online learning.
- Student readiness is not evenly distributed.
- Lecturers have more roles but do not understand virtual-based learning and LMS (Learning Management System).

Discussion

Based on the policy analysis, the discussion of the research intended to provide information and recommendations that can be used as a basis for policymakers (revisions and new policies) related to learning during a pandemic. So, in addition to discussing the findings, it also provided recommendations based on the recommendations by researchers and the results of analysis based on further studies. Based on the results of this study, the problem of ineffective implementation of online learning policies during the COVID-19 pandemic was caused by the following problems:

- Problems with teachers' or lecturers' readiness for online learning: lack of teachers' readiness and understanding of virtual learning (LMS).
- Problems related to student readiness and online learning abilities include: lack of student experience, technology access (difficulties using technology), guidance for independent learning, student readiness, financial support, and students' tendency to dislike studying at home.
- Problems related to cross-sectoral cooperation (education stakeholder support): lack of collaboration among stakeholders (government, parents, teachers, and the community).
- Problems related to the readiness of online learning support facilities (distance learning support facilities and infrastructure: lack of learning technology infrastructures that support online learning

Based on their findings of implementation problems during the pandemic, the researchers recommended improvements for further policies in accordance with existing conditions, including:

- Optimization of facilities or media to support online learning.
- Optimizing teacher competence in designing and implementing online learning.
- Optimizing student readiness for online learning.
- Optimizing the role of the community in supporting online learning.

The findings of implementation problems, as well as recommendations from the results of the research above, were then used as the basis for formulating alternative policies, as shown in Table 2:

Table 2
Alternatives for Post-Pandemic Education Policies

Level	Policy Problems	Policy Recommendations	Policy Alternatives
Basic or elementary education	• Technology for distance learning (tools and applications). • Teacher readiness and ability. • Collaboration (between government, parents, teachers, and community).	• Learning design based on student needs. • Learning integration in online learning practices. • Increased teacher technology literacy.	• Strengthening teacher competence in online learning and digital technology mastery.
Secondary Education	• Student access to technology. • Student assistance in learning	• Preparation of e-learning-based learning students • Tailoring technology and methodology to student needs. • Teacher assistance in student learning.	• Improving digital competence and guiding student learning. • Technology provision.
Higher Education (HE)	• Students prefer to study offline • Student readiness in online learning • Technological and financial barriers • Lecturers have not mastered online learning management • Internet infrastructure and network support	• Improving the teaching competence and technology of educators • Optimizing HE stakeholder support • Utilization of learning media and applications • Improvement of distance learning support facilities (standardized technology tools, online library, Distance Learning Center, optimization of bandwidth and access points)	• Improving learning and technological competencies for lecturers and students • Improved distance learning support facilities • Dissemination of online learning to stakeholders (especially parents of students)

The problem of the ineffective implementation of online learning policies is basically caused by a lack of supporting infrastructure, such as: (a) inadequate infrastructure; (b) lack of equipment and facilities for e-learning; (c) lack of dedicated e-learning support workers; (d) lack of formal regulations for e-learning; and (e) lack of knowledge about e-learning (Moeinikia et al., 2022). This means that the readiness of the infrastructure (hardware and software) that supports online learning is a mandatory requirement for the implementation of online learning.

Apart from supporting infrastructure, teachers' digital readiness and competency are also key factors in realizing success in online learning. In line with the opinion of Guillen-Gamez et al. (2020), MOOCs are a strategy that can improve teachers' digital competence. MOOCs are a good strategy for developing and improving teacher digital competence in all fields (De La Roca et al., 2018). Teachers' digital competence in the field of safe and responsible use of technology can be increased through online training in the MOOC format, using Social Labs, social network simulations, as educational media (Budnyk et al., 2021). Furthermore, MOOCs are designed with a collaborative and pedagogical approach by creating practical units that allow teachers to learn certain cloud-based tools (CBT), design their own learning activities, and learn how to incorporate them in different contexts (Hilli, 2020).

Students' unpreparedness for learning is also an inhibiting factor in realizing the effectiveness and success of learning during the COVID-19 pandemic. Therefore, students need to be prepared to engage in online learning, including preparations related to technology, learning management, pedagogical practices, and social roles (Vonderwell & Savery, 2004). Therefore, it is important to be able to carry out online learning effectively, which can be supported by the application of the principles of meaningful discourse and community inquiry principles for the development of online learning communities (Khalili, 2020).

Conclusion and Implication

The implementation of distance learning management policies or online learning during the COVID-19 pandemic in Indonesia faced various problems that resulted in ineffective learning. The main problems in implementing the policy include: (a) teacher readiness for online learning; (b) the readiness and ability of students; (c) stakeholder support in education; and (d) distance learning supporting facilities and infrastructure. Therefore, the implication for the effectiveness of implementing online learning management policies in the post-pandemic period is the need to increase online learning support facilities, improve the digital competence of teachers, staff, and students, and increase the role of community support.

This research has limitations, namely that the method used was qualitative and the data sources come from international journals indexed by Scopus only, which are retrieved or accessed through the ERIC library (indexer). So, further researchers can expand their research data sources through articles in other international journals, such as Web of Science (WoS) or others, as well as develop their research using either a quantitative approach or mixed methods.

References

Adit, A. (2020). *12 aplikasi pembelajaran daring kerjasama Kemendikbud, gratis!* Kompas.Com. [12 free online learning apps developed in collaboration with the Ministry of Education and Culture! Kompas.com.]. https://edukasi.kompas.com/read/2020/03/22/123204571/12-aplikasi-pembelajaran-daring-kerjasama-kemendikbud-gratis?page=all

Aditya, D. S. (2021). Embarking digital learning due to COVID-19: Are teachers ready? *JOTSE: Journal of Technology and Science Education*, *11*(1), 104–116. https://doi.org/10.3926/jotse.1109

Alexander, N. A. (2013). *Policy analysis for educational leaders: A step by step approach.* Pearson Education, Inc.

Aliyyah, R. R., Rachmadtullah, R., Samsudin, A., Syaodih, E., Nurtanto, M., & Tambunan, A. R. S. (2020). The perceptions of primary school teachers of online learning during the COVID-19 pandemic period: A case study in Indonesia. *Journal of Ethnic and Cultural Studies*, *7*(2), 90–109. https://doi.org /10.29333/ejecs/388

Almanthari, A., Maulina, S., & Bruce, S. (2020). Secondary school mathematics teachers' views on e-learning implementation barriers during the COVID-19 pandemic: The case of Indonesia. *Eurasia Journal of Mathematics, Science and Technology Education*, *16*(7), Article em1860. https://doi.org /10.29333/ejmste/8240

Ary, D., Jacobs, L. C., & Sorensen, C. (2010). *Introduction to research in education* (8th ed.). Wadsworth.

Assidiqi, M. H., & Sumarni, W. (2020). Pemanfaatan platform digital di masa pandemi Covid-19 [Utilization of digital platforms during the COVID-19 pandemic]. *Prosiding Seminar Nasional Pascasarjana (PROSNAMPAS)*, *3*(1), 298–303.

Baety, D. N., & Munandar, D. R. (2021). Analisis Efektifitas Pembelajaran Daring Dalam Menghadapi Wabah Pandemi Covid-19. *Edukatif: Jurnal Ilmu Pendidikan*, *3*(3), 880–989. https://doi.org/ 10.31004/edukatif.v3i3.476

Bailey, D. H., Duncan, G. J., Murnane, R. J., & Au Yeung, N. (2021). Achievement gaps in the wake of COVID-19. *Educational Researcher*, *50*(5), 266–275. https://doi.org/10.3102/0013189X211011237

Budnyk, O., Zozuliak-Sluchyk, R., Nedilskyi, S., Chervinska, I., Malaniuk, T., Prevysokova, N., & Ketsyk-Zinchenko, U. (2021). Modern digital distance learning technologies: Challenges of future teacher training. *Revista Inclusiones*, *8*(1), 41–53. https://www.revistainclusiones.org/index.php/inclu/article/view/178

Damayanthi, A. (2020). Efektivitas Pembelajaran Daring di Masa Pandemi Covid-19 pada Perguruan Tinggi Keagamaan Katolik [The Effectiveness of Online Learning During the COVID-19 Pandemic at Catholic Religious Colleges]. *EDUTECH*, *19*(3), 189–210. https://doi.org/ 10.17509/e.v1i3.26978

Daud, M. (2020). *COVID-19: Laporan baru UNICEF mengungkap setidaknya sepertiga anak sekolah di seluruh dunia tidak dapat mengakses pembelajaran jarak jauh selama sekolah ditutup* [COVID-19: A new UNICEF report reveals that at least a third of schoolchildren worldwide are unable to access remote learning while schools are closed]. Unicef Indonesia.

De La Roca, M., Morales, M., Teixeira, A. M., Sagastume, F., Rizzardini, R. H., & Barchino, R. (2018). MOOCs as a disruptive innovation to develop digital competence teaching: A micromasters program edX experience. *European Journal of Open, Distance and E-Learning*, *21*(2). https://old.eurodl.org/?p=archives&sp=brief&year=2018&halfyear=2&article=771

Detiknews. (2020). *Pandemi Corona, Pemerintah didorong terbitkan PP social distancing* [The government is encouraged to issue social distancing government regulations in the case of the Corona pandemic]. Detiknews. https://news.detik.com/berita/d-4949725/pandemi-corona-pemerintah-didorong-terbitkan-pp-social-distancing

Dunn, W. N. (2017). *Public policy analysis: An integrated approach*. Routledge.

Guillen-Gamez, F. D., Mayorga-Fernández, M. J., & Del Moral, M. T. (2020). Comparative research in the digital competence of the pre-service education teacher: Face-to-face vs blended education and gender. *Journal of E-Learning and Knowledge Society*, *16*(3), 1–9. http://je-lks.org/ojs/index.php/Je-LKS_EN/article/view/1135214

Hermanto, H., Rai, N. G. M., & Fahmi, A. (2021). Students' opinions about studying from home during the COVID-19 pandemic in Indonesia. *Cypriot Journal of Educational Sciences*, *16*(2), 499–510. https://doi.org/https://doi.org/10.18844/cjes.v16i2.5627

Hikamah, S. R. (2021). Developing virtual communication skills in online learning based on modified PBL during the COVID-19 Pandemic. *International Journal of Education and Practice*, *9*(2), 323–339. https://doi.org/10.18488/journal.61.2021.92.323.339

Hilli, C. (2020). Extending classrooms through teacher collaboration in virtual learning environments. *Educational Action Research*, *28*(4), 700–715. https://doi.org/ 10.1080/09650792.2019.1654901

Husni Rahiem, M. D. (2021). Indonesian university students' likes and dislikes about emergency remote learning during the COVID-19 pandemic. *Asian Journal of University Education (AJUE)*, *17*(1), 1–18. https://doi.org/ 10.24191/ajue.v17i1.11525

Kasdiah. (2020). *Dampak pembelajaran online di wilayah terpencil* [Impact of online learning in remote areas]. Kementerian Agama Sulawesi Tengah. https://sulteng.kemenag.go.id/berita/detail/dampak-pembelajaran-online-di-wilayah-terpencil

Kemendikbud, K. P. (2020). Buku saku keputusan bersama 4 menteri tentang panduan penyelenggaraan pembelajaran di masa pandemi COVID-19 [A pocket book for adjusting the implementation of learning in the 2020–2021 school year and 2020–2021 academic year during the coronavirus disease of 2019 (COVID–19) pandemic: a joint decision of 4 ministers: minister of education and culture, minister of. Sekretariat Jenderal Kemdikbud RI]. https://bpmpkaltara.kemdikbud.go.id/2021/12/22/buku-saku-keputusan-bersama-4-menteri-tentang-panduan-penyelenggaraan-pembelajaran-di-masa-pandemi-covid-19/

Khalili, H. (2020). Online interprofessional education during and post the COVID-19 pandemic: a commentary. *Journal of Interprofessional Care*, *34*(5), 687–690. https://doi.org/ 10.1080/13561820.2020.1792424

Makruf, I., Rifa'i, A. A., & Triana, Y. (2022). Moodle-based online learning management in higher education. *International Journal of Instruction*, *15*(1), 135–152. https://www.e-iji.net/dosyalar/iji_2022_1_8.pdf

Mantasiah, R. (2021). Assessing verbal positive reinforcement of teachers during school from home in the Covid-19 pandemic era. *International Journal of Instruction*, *14*(2), 1037–1050. https://doi.org/10.29333/iji.2021.14259a

Martha, A. S. D., Junus, K., Santoso, H. B., & Suhartanto, H. (2021). Assessing undergraduate students' e-learning competencies: A case study of higher education context in Indonesia. *Education Sciences*, *11*(4), Article 189. https://doi.org /10.3390/educsci11040189

Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook*. SAGE Publications.

Moeinikia, M., Mehravar Giglouu, S., Kazami, S., Mirzaei Shojakhanlou, M., & Omidvar, A. (2022). Analysis of strengths, weaknesses, opportunities and threats of e-learning from the perspective of experts in the period of COVID-19 pandemic. *Interdisciplinary Journal of Virtual Learning in Medical Sciences*, *13*(2), 127–136. https://ijvlms.sums.ac.ir/article_48539_e3d4df76054c3f369d08e889d31a5c9f.pdf

Patton, C. V, & Sawicki, D. S. (1993). *Basic methods of policy analysis and planning*. Prentice Hall Englewood Cliffs.

Patton, C. V, Sawicki, D. S., & Clark, J. J. (2016). *Basic methods of policy analysis and planning* (3rd ed.). Routledge Taylor & Francis Group.

Pembatasan sosial berskala besar dalam rangka percepatan penanganan corona virus disease 2019 (COVID-19) [Government Regulation Regarding Large-Scale Social Restrictions in the Context of Accelerating the Handling of Corona Virus Disease 2019 (COVID-

19)], (2020). https://peraturan.bpk.go.id/Home/Details/135059/pp-no-21-tahun-2020

Rahmadi, I. F. (2021). Teachers' technology integration and distance learning adoption amidst the Covid-19 crisis: A reflection for the optimistic future. *Turkish Online Journal of Distance Education*, *22*(2), 26–41. https://doi.org/ 10.17718/tojde.906472

Rosana, F. C. (2020). *Pro kontra kebijakan lockdown, ini tanggapan Jusuf Kalla*. Bisnis.Tempo.Co. [Pros and cons of the lockdown policy, this is Jusuf Kalla's response. Bisnis.Tempo.Co]. https://bisnis.tempo.co/read/1320796/pro-kontra-kebijakan-lockdown-ini-tanggapan-jusuf-kalla

Sahara, W. (2021). *Sebaran varian Alpha, Beta, dan Delta di Indonesia hingga 21 Agustus 2021*. Kompas.Com. [distribution of Alpha, Beta, and Delta variants in Indonesia until August 21, 2021. Kompas.Com.] https://nasional.kompas.com/read/2021/08/23/09442981/sebaran-varian-alpha-beta-dan-delta-di-indonesia-hingga-21-agustus-2021.

Siron, Y., Wibowo, A., & Narmaditya, B. S. (2020). Factors affecting the adoption of e-learning in Indonesia: Lesson from Covid-19. *JOTSE: Journal of Technology and Science Education*, *10*(2), 282–295. https://doi.org /10.3926/jotse.1025

Sueca, I. N., Sumertha, I. W., & Winaja, I. W. (2021). A time-lag study on perceived threat of COVID-19 in Hindu religious community: Moderating role of hindu religious coping. *Journal of Ethnic and Cultural Studies*, *8*(3), 217–243. https://doi.org/10.29333/ejecs/855

Suharwoto, G. (2020). *Pembelajaran online di tengah pandemi Covid-19, tantangan yang mendewasakan*. Pusdatin Kementerian Pendidikan, Kebudayaan, Riset Dan Teknologi. [Online learning in the midst of the COVID-19 pandemic is a mature challenge. Pusdatin Ministry of Education, Culture, Research, and Technology]. https://pusdatin.kemdikbud.go.id/pembelajaran-online-di-tengah-pandemi-covid-19-tantangan-yang-mendewasakan/.

Sulisworo, D., Fatimah, N., & Sunaryati, S. S. (2020). A quick study on SRL profiles of online learning participants during the anticipation of the spread of COVID-19. *International Journal of Evaluation and Research in Education*, *9*(3), 723–730. https://doi.org/10.11591/ijere.v9i3.20642

Sumardi, S., & Nugrahani, D. (2021). Adaptation to emergency remote teaching: Pedagogical strategy for pre-service language teachers amid covid-19 pandemic. *Turkish Online Journal of Distance Education*, *22*(2), 81–93. https://doi.org/https://doi.org/10.17718/tojde.906553

Surat edaran Menteri Pendidikan dan Kebudayaan RI: Pelaksanaan kebijakan pendidikan dalam masa darurat Coronavirus Disease (COVID-19 [Minister of Education and Culture Circular Letter: Implementation of Education Policy in the Emergency Period of the Spread of COVID-19], Pub. L. No. 4 (2020). https://pusdiklat.kemdikbud.go.id/surat-edaran-mendikbud-no-4-tahun-2020-tentang-pelaksanaan-kebijakan-pendidikan-dalam-masa-darurat-penyebaran-corona-virus-disease-covid-1-9/.

Vonderwell, S., & Savery, J. (2004). Online learning: Student role and readiness. *Turkish Online Journal of Educational Technology-TOJET*, *3*(3), 38–42. https://eric.ed.gov/?id=EJ1101894

Weimer, D. L., & Vining, A. R. (2011). *Policy analysis* (5th ed.). Logman.

Yudiawan, A., & Sunarso, B. (2021). Successful online learning factors in COVID-19 era: Study of Islamic higher education in West Papua, Indonesia. *International Journal of Evaluation and Research in Education*, *10*(1), 193–201. https://doi.org/10.11591/ijere.v10i1.21036

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