

Analysis of Education Sector Policies During the Covid 19 Pandemic: A Literature Review

Koento P.N. Irianto^{1*}, Kristina Setyowati², Rino Ardhan Nugroho³

¹ Master Program in Public Administration Department, Faculty of Social and Political Sciences, Universitas Sebelas Maret

² Public Administration Department, Faculty of Social and Political Sciences, Universitas Sebelas Maret

³ Public Administration Department, Faculty of Social and Political Sciences, Universitas Sebelas Maret

Email: koentoseptember92@gmail.com

ABSTRACT

The Covid 19 pandemic hitting the world, especially Indonesia, has affected many sectors, including the economy, health, education, and many more. This research focuses on the impact of the Covid 19 pandemic on the education sector and the steps taken by the government to continue education during a pandemic. The policy was done by the government through online learning to prevent the spread of Covid 19. By being supported by technology, this policy can work in big cities but not in remote areas. This research uses the literature review method. The purpose of this research is 1) to analyse the policies implemented by the government concerning online learning during the pandemic and 2) to analyse whether Indonesia is fully ready to use the smart city concept. The implementation of online learning in the new normal era can describe the condition of Indonesian society, where not all Indonesians understand or can keep up with the development of the digital era. Online learning makes it easy to transfer information in various situations and conditions. The various benefits of the ease of online learning are supported by various platforms, such as discussions face-to-face virtually. The smart city, which is expected to facilitate the service of the Indonesian people, can then be implemented in all cities in Indonesia.

Keywords: *Pandemic, Online Learning, New Normal, Smart City.*

1. INTRODUCTION

On December 31st, 2019, a similar case with unknown pneumonia appeared in Wuhan, China [1]. This case was caused by the coronavirus or more be known as COVID-19. The Coronavirus has also been epidemic in Indonesia since early March until now on May 12, 2020, there are 17,514 confirmed positive cases spread across 34 provinces and 415 districts/ cities [2]. The impact of the COVID-19 pandemic has changed various aspects of human life. The COVID-19 outbreak urges testing of distance education almost which has never been carried out simultaneously before [3] for all elements of education, namely students, teachers to parents. Remembering during a pandemic, location and distance are big problems at this time [4]. Therefore, distance learning becomes a solution to overcome difficulties in implementing face-to-face learning. This presents a challenge to all elements and levels of education to keep classrooms active even though schools have been closed. It is hoped that all educational

institutions do not carry out activities, as usual; this can minimize the spread of the COVID-19 disease.

The same thing has been done by various countries affected by the COVID-19 disease. The lockdown or quarantine policy is carried out to reduce the interaction of many people who can provide access to the spread of the coronavirus. The policies taken by many countries, including Indonesia are closing all educational activities, making the government and related institutions present an alternative educational process for students who cannot carry out the educational process at educational institutions. Online learning through virtual classrooms can be an alternative way so that learning activities can be continued during the COVID-19 epidemic [5]. Online learning is developed as a learning medium that can connect online between educators and students in a virtual classroom without having to be in one room physically [6]. Online learning can be done with virtual classrooms, which are learning experiences in a synchronous or asynchronous environment using various devices (such as laptops or

smartphones) with internet access [7]. Various platforms are used to facilitate the learning process which serves as a medium for delivering material, assessments, or for submitting assignments.

These platforms include WhatsApp Group, Zoom Cloud Meeting, Google Classroom, Google Meet, Google Form, and e-mail. The period of the Covid-19 pandemic can be said to be a digital opportunity in the world of education, both in the use of technology in line with industry 4.0. The rapid development of technology seems inseparable from human daily life. Almost everyone carries a cell phone wherever they go. In line with this, many places now provide free internet facilities. This makes it easy to access information anytime and anywhere. In other words, the world is in your hands. Moreover, in the era of the internet of things (IoT) in the industrial era 4.0, gadgets are an integral part of everyday life. Life is now so connected and has entered an era of increasingly sophisticated usage. Society is fed with an abundance of information and it is known as the world is at the fingertips. However, the development of this technology can have a negative impact if it is not wise in using it.

2. METHOD

This study uses a systematic literature review for synthesizing various relevant research results so that the facts presented to policymakers become more comprehensive and balanced [8]. Systematic literature review is a research method to identify, evaluate and interpret all relevant research results related to certain research questions, certain topics, or phenomena of concern [9].

Content analysis was carried out on various scientific articles related to online learning during the COVID-19 pandemic. Scientific articles are obtained from international, national journals and various other similar sources. In principle, a systematic literature review is a research method that summarizes the results of primary research to present more comprehensive and balanced facts. Meanwhile, meta-analysis is one way to synthesize results statistically (quantitative technique) [8].

Another way to synthesize results is a narrative technique (qualitative technique). In other words, meta-analysis is part of a systematic literature review method with a quantitative approach. Furthermore, an unsystematic review (traditional review) is a review method in which the method of collecting facts and the synthesis technique does not follow the standard methods as a systematic literature review.

3. DISCUSSION

The research findings get many results and it shows, especially regarding the readiness of the government and the community in carrying out school activities through online learning. The policy of suddenly online learning was felt as the main factor in the lack of implementation of this policy. Unpreparedness does not only occur on the school side but the students are still met with a lot of unpreparedness. Various ways have been done by the government to expedite the process of teaching and learning activities, but it still cannot run perfectly. This can be proven by the findings that the researchers found, it can be concluded and there is a common thread that reinforces each other.

Social and physical distancing policies to minimize the spread of COVID-19 encourage all elements of education to activate classes even though schools are closed. Closing schools is the most effective mitigation measure to minimize the spread of the plague to children. The solution given is to implement learning at home by utilizing various supporting facilities.

During the COVID-19 pandemic, learning at home or online is a solution to continuing the rest of the semester. Online learning is defined as a knowledge transfer experience using video, audio, images, text communication, software [10], and with internet network support [7]. This is a modification of knowledge transfer through website forums [10] and digital technology trends as a hallmark of the 4.0 industrial revolution to support learning during the COVID-19 pandemic.

Some infrastructure supports free online learning through various discussion rooms such as Google Classroom, WhatsApp, Smart Class, Zenius, Quipper, and Microsoft [11]. WhatsApp features include WhatsApp Group can be used to send both text messages and pictures.

Face-to-face discussions and knowledge transfer are like meeting through various free teleconference video platforms such as Zoom and Google Meet. The platform allows educators and students to meet and interact virtually with instant message facilities and presentation activities [12]. These various services can be used to support the transfer of knowledge to discussions regarding learning content. This is also done by utilizing all local resources nationally such as television channels for education [7]. In Indonesia, television on the TVRI channel is used to broadcast educational content nationally. The broadcast content is classified based on the level of education according to the curriculum in Indonesia.

The various benefits obtained, of course, have obstacles that are felt by educators and students in online learning. The constraints faced are the various

regional conditions in Indonesia, which means that not all areas are covered by internet services and the distribution of internet networks is slow at times [13]. This also allows high internet usage to effect on the health of students. Another obstacle found was the ability of parents to provide online education facilities [14] such as the use of internet networks that require money [15]. The first obstacle is the condition of the students' parents who use the WhatsApps (WA) application more. The second obstacle is the difficulty in finding internet networks and the existence of smartphone devices more often carried to work by parents. The WA application is also easier because children use it a lot and it is easy to be operated it. The third obstacle is signal difficulty [16]. At the beginning of online learning, the material was only given through Microsoft Word and then students read so that after a long time the students felt bored. When the teacher provides online learning via video, students are very enthusiastic about taking part in the lesson. Especially if the students are doing quizzes through Google Forms, students are very enthusiastic because they can see the correct answer first-hand and they can also see first-hand the score or the result of their work. Zoom Meetings are only held occasionally because remembering that not all students can access them, especially some students who are constrained by signals.

Online learning has obstacles. The first obstacle is not all students have devices (HP). The second obstacle is having a cell phone but being constrained by cell phone facilities and an internet connection, hampered in sending tasks due to signal difficulties. Further data explains that some students do not have their cell phones, so they have to borrow them. The third obstacle is that parents have cell phones but parents work all day outside the house so that parents can only accompany them at night. The fourth obstacle is the limited internet connection; some students do not have cell phones and good internet network. The fifth obstacle is not all students have cell phone facilities and some parents who do not understand about technology. This makes it difficult for parents to accompany and facilitate children [16]. Cases like this are very hindering and the teacher has to repeat the notification. The sixth obstacle is the guardian does not always receive information immediately because of the limited internet quota. For example, today you have an assignment, but you can open WA 5 days later. Even at the beginning of online learning students could not open the WA web file because they did not know the application. Security barriers are limited for cell phone features, constraints on signal, and internet quota. The seventh obstacle is technically not all student guardians have an Android cell phone facility [16]. In addition, many students experience boredom in studying online so that they sometimes answer questions carelessly. The

concentration and motivation of students when studying at home and school will of course be different. The eighth obstacle is for submitting their assignment students use their parents' smartphones so they can submit after their parents come home from work. There are even some students who cannot submit their assignments.

4. ANALYSIS AND CONCLUSIONS

Online learning makes it easy to transfer information in various situations and conditions. The various benefits of the ease of online learning are supported by various platforms, such as discussions to face-to-face virtually. However, this needs to be evaluated and adjusted to local conditions; the ability of parents to provide online learning facilities is different. The key is to maximize the ability of students to learn well in a pandemic situation.

The implementation of online learning can describe the condition of Indonesian society, where not all Indonesians understand or can keep up with the development of the digital era. There are still people who do not own smartphones and it is an obstacle. Silver limitations are the main thing in supporting this digitalization era and networks are also a problem in accessing information in the digital era. Even though in big cities these obstacles are not found, but it can still be found in rural areas.

Finally, it can be concluded that the government in this case wants to implement smart cities, where smart cities require adequate network access and devices. If the conditions like this, the government must also pay attention to network access and community device ownership to succeed and support the government program.

For further research, there is a need for a review of the use of technology in online learning, especially in certain areas that still lack internet access or lack technicians in the Information and Technology field. In addition, the saturation encountered in some students must be anticipated by the school by providing a certain place for learning activities but still prioritizing health protocol.

REFERENCES

- [1] A. Lee, "Wuhan novel coronavirus (COVID-19): why global control is challenging?," *Public Health*, vol. 179, p. A1, 2020.
- [2] R. K. Dewi, "Perjalanan Kasus Virus Corona di Indonesia...," Sep. 2020.
- [3] L. Sun, Y. Tang, and W. Zuo, "Coronavirus pushes education online," *Nat. Mater.*, vol. 19, no. 6, p. 687, 2020.

- [4] J. W. Kusuma and H. Hamidah, "Perbandingan hasil belajar matematika dengan penggunaan platform Whatsapp Group dan webinar Zoom dalam pembelajaran jarak jauh pada masa pandemik Covid 19," *JIPMat*, vol. 5, no. 1, 2020.
- [5] Y. Ming and P. Peggy, "Prevención de la enfermedad por coronavirus (COVID-19): educación en el aula virtual para la higiene de las manos," *La Form. enfermeras en la práctica*, vol. 45, p. 102782, 2020.
- [6] D. Fitriana, "Peran Media E-Learning Dalam Pembelajaran Untuk Mengoptimalkan Kemampuan Literasi Matematika dan Norma Sosiomatematik," *Progr. Stud. Pendidik. Guru Sekolah. Dasar Progr. Stud. Pendidik. Mat. Univ. Muria Kudus,(0291)*, pp. 58–62, 2018.
- [7] X. Zhu and J. Liu, "Education in and after Covid-19: Immediate responses and long-term visions," *Postdigital Sci. Educ.*, vol. 2, no. 3, pp. 695–699, 2020.
- [8] W. Wilianto and A. Kurniawan, "Sejarah, Cara Kerja Dan Manfaat Internet of Things," *Matrix J. Manaj. Teknol. dan Inform.*, vol. 8, no. 2, pp. 36–41, 2018, doi: 10.31940/matrix.v8i2.818.
- [9] B. Kitchenham, "Procedures for performing systematic reviews," *Keele, UK, Keele Univ.*, vol. 33, no. 2004, pp. 1–26, 2004.
- [10] G. Basilaia and D. Kvavadze, "Transition to Online Education in Schools during a SARS-CoV-2 Coronavirus (COVID-19) Pandemic in Georgia," *Pedagog. Res.*, vol. 5, no. 4, 2020, doi: 10.29333/pr/7937.
- [11] A. Abidah, H. N. Hidaayatullaah, R. M. Simamora, D. Fehabutar, and L. Mutakinati, "The Impact of Covid-19 to Indonesian Education and Its Relation to the Philosophy of 'Merdeka Belajar,'" *Stud. Philos. Sci. Educ.*, vol. 1, no. 1, pp. 38–49, 2020, doi: 10.46627/sipose.v1i1.9.
- [12] T. Wiranda and M. Adri, "Rancang bangun aplikasi modul pembelajaran teknologi wan berbasis android," *VoteTEKNIKA (Vocational Tek. Elektron. Dan Inform.*, vol. 7, no. 4, pp. 85–92, 2020.
- [13] D. R. A. U. Khasanah, H. Pramudibyanto, and B. Widuroyekti, "Pendidikan dalam masa pandemi covid-19," *J. Sinestesia*, vol. 10, no. 1, pp. 41–48, 2020.
- [14] T. Obiakor and A. P. Adeniran, "Covid-19: Impending Situation Threatens to Deepen Nigeria's Education Crisis," 2020.
- [15] S. Jay and H. Jones, "Towards a framework for higher education for marine spatial planning," *Mar. Policy*, vol. 99, no. September 2018, pp. 230–238, 2019, doi: 10.1016/j.marpol.2018.10.039.
- [16] A. Anugrahana, "Hambatan, Solusi dan Harapan: Pembelajaran Daring Selama Masa Pandemi Covid-19 Oleh Guru Sekolah Dasar," *Sch. J. Pendidik. dan Kebud.*, vol. 10, no. 3, pp. 282–289, 2020, doi: 10.24246/j.js.2020.v10.i3.p282-289.