Digital Learning is the New of Education Face:
Practice from Many Countries

AD Hastutiningsih[1, *] Sugiyono[2], Suyanto[2], UB Wibowo[2]

[1] *Graduate Program, Faculty of Education, Universitas Negeri Yogyakarta, Indonesia*
[2] *Department of Educational Management, Faculty of Education, Universitas Negeri Yogyakarta, Indonesia*
[*]*Corresponding author. Email: arum.dwi@uny.ac.id; arumdwi.2020@student.uny.ac.id*

ABSTRACT
The existence of the coronavirus in the world today makes education evolve in all aspects. The Ministry of Education and Culture orders online learning as a solution for implementing learning at all levels of education. This paper is a part of a position paper that aims to explain the author's arguments related to the issue of digital learning. This paper seeks to influence the reader that our argument is credible. The author's argument is described in several parts: the current state of education, digital learning; digital learning innovations in several countries; and what essential points must be prepared in digital learning as the new face of education.

Keywords: Digital Learning, Education New Face, Education Challenge.

1. INTRODUCTION

Covid-19 is a virus that has a fast, easy transmission effect and causes several acute respiratory diseases originating from Wuhan, China. The Corona-19 virus has become a global pandemic that affects all aspects of life [1]. The condition has forced the state to take strategic policies to save society from the attack of this deadly virus. Various new guidelines have been implemented, including the Education policy, which requires online teaching and learning process activities. The schools previously using conventional methods should change to modern techniques that use the internet as the primary access or often known as online learning models. Various online learning models are applied at all levels of education while still paying attention to the government's health protocols. Health protocols set by the government include: 1) social distancing, 2) online learning processes, 3) working from home (WFH), 4) avoiding crowds, and 5) postponing meetings or conferences [2]. Education implements isolation into the learning process by organizing an online learning model or e-learning or digital learning [3]. Digital learning is a new model that relies heavily on computers and the internet in its use. In the implementation of digital learning, learning tools assist students in studying online material disrupted due to restrictions on activities at school [4]. Some of the learning tools available in web form include google classroom, digital library, Youtube, Docebo, Linkedin, moodle, Edmodo, priamindisoft, and others. Online learning also allows students to challenge [5] physically. In the implementation of digital learning/e-learning, there are several obstacles such as area accessibility, affordability, pedagogical processes in learning, lifelong learning, and the implementation of educational policies [6]. In terms of educational facilities, students also experience challenges during the digital learning period equally to data security, guidelines set by the government, and so on. The ability to find online learning media that suits their needs and expectations [7]. Furthermore, [8] explained the challenges faced by teaching staff, namely the difficulty of teaching staff to access the internet, inadequacy infrastructure, class administration, and inadequate teacher and staff.

Apart from the various challenges faced in the online learning process, digital learning is the right choice for the COVID-19 condition and has become the new face of education in the world, proving the seriousness of education in responding to the need for technology. Through digital learning, it allows students to take specific subjects without having to go to certain educational institutions [9]. This, of course, has its

advantages in terms of cost and time owned by students. According to [10] describes the results of the online learning analysis into the following SWOC format: Strengths (flexibility in terms of time and place, availability of extensive learning resources, and serving various needs of many people, able to provide direct feedback), Weaknesses (technical difficulties, student capacities and self-confidence, time management, anxiety and frustration disorders, lack of attention to students), Opportunities (coverage of innovation and digital development, programs designed to be flexible, strengthen problem-solving skills, critical thinking, and adaptability, users cover all ages, using innovative educational approaches), Challenges (uneven distribution of infrastructure, different education quality, digital divide, technology costs).

2. METHOD

The author uses the position paper method in this article. This is a method that represents an opinion related to a hotly discussed case. This method is simply like a debate in that position. Referring to [11], this method is known as conceptual analyzes in methodology. The position paper method aims to convince the reader that the author's argument is valid and justifiable. This article is also part of a spontaneous study based on current issues in the world [12].

According to [13], there are several steps in this position paper method, namely: (1) Choose a topic for our paper; the author chooses the topic of digital learning as the central issue in the current educational framework where the education process is carried out online, (2) Conduct preliminary research; the author conducted previous research in the form of library research referring to journals and government policies related to the topic of digital learning. Library research includes several elements which are divided into three main topics (world education trends, challenges faced, digital learning innovations) (3) Challenge our theme; the author deepens the themes taken through various policy studies and field observations related to the subject (4) Continue to collect supporting evidence; the author collects supporting evidence from news, blogs, and policies in the world of education in dealing with digital learning and (5) Outline; The writer made outlines derived from the analysis of the subject matter and the available supporting evidence.

3. OUR POINT OF VIEW & DISCUSSION

3.1. The Current State of Education

Various countries face the same difficulties in implementing online learning. In Asia, the condition of facilities and infrastructure is a reasonably steep stumbling block in most countries. They are worsened by economic conditions that are still middle to lower, and curriculum adjustments that are applied to the online learning process in various regions with different adjustable situations and needs. The following will describe the educational challenges based on the previous articles.

3.1.1. Indonesia

As the effect of the virus, the country must conduct online teaching and learning activities. Usually, the schools are carried out directly, but this has been done online for now due to the pandemic condition. The teaching staff works hard, but parents also participate in accompanying children studying at home to help explain various subjects and accompany children to do school assignments.

Various kinds of challenges must be faced for this online education system; facilities and resources are also necessary for addition to personal discipline to study independently. The fact is that there are still a lot of children who are constrained by facilities for learning, not only students, but also educators and parents who have difficulty both in providing learning tools such as cellphones and laptops and credit for internet connections. This online learning system indirectly makes the socio-economic gap that has been existed for a long time, and become more comprehensive during the pandemic.

3.1.2. Malaysia

Not much different from Indonesia, Malaysia also encountered obstacles in implementing digital learning. [14] provide examples of critical issues such as application limitations, lack of internet access, and lack of technological infrastructure. Furthermore, [15] consider teachers to be less able to optimize access to open communication due to the difficulty of utilizing information technology. Fifty-two percent of Malaysian students face challenges because they do not have the appropriate gadget for learning [16].

3.1.3. India

The effects of the spread of the coronavirus have forced education to shift towards online teaching -- that cannot be predicted when it will be completed -- making online teaching the only option available [17]. Teaching staff in India are faced with difficulties in distinguishing between academic and non-academic duties [18]. Students also need to adapt to a new culture in online learning [19].

3.1.4. Thailand

Education in Thailand faces several challenges due to the many institutions that limit face-to-face learning and training with social distancing policies that require the learning process to shift to virtual classrooms [20]. Many schools are located in rural areas and have low incomes. on the other hand, many students cannot get a proper education [21]. Teachers must teach several different subjects, and some have no work experience [22]. Students are increasingly accustomed to the individualism caused by this condition and are more likely to be mentally traumatized [23].

3.1.5. The Philippines

The challenges in the Philippines include limited access to technology due to uneven internet access, which is the main focus in the online learning process. Referring to the [24], in December 2019, it was recorded that the population in the Philippines had internet access as much as 67%, which means that internet access in this country was still limited. This significantly impacts the learning process, which requires unlimited internet access. This condition harms student behavior in terms of focus and mood. This is due to the higher level of individualism and other factors [25]. The teachers are experiencing frustrating glitches because of poor internet access, which makes technological issues a source of anxiety and also stress [26].

3.2. Digital Learning

Jay Cross proposed Digital learning (E-Learning) in 1999 [27]. Digital learning is an act of delivering the material in digital media (e.g., text or images) via the Internet [28]. Computer and network media technology could use different places, times, schedules, and individual-centered learning. Digital learning covers all aspects of daily life with the development of knowledge and information rapidly [29]. Digital learning is a new mechanism for taking materials for learning activities by Wi-Fi [30]. Previous research divided digital learning into four types [31]: teaching materials, tools, delivery, and autonomous learning.

3.3. Digital Learning Innovations

Adapting to the times and educational needs for technology, several countries carry out educational innovations through technological innovations and learning model innovations. Learning models in the digital era are divided into several types: blended learning, distant learning, mobile learning (M-learning), and virtual learning environments.

Blended learning combines learning models between traditional models (face-to-face) with modern learning models (using technology or known as e-learning). There are several types of distance learning, including video conferencing, synchronous learning, asynchronous learning, open-scheduled learning, computer-based learning. And others. Mobile learning is a learning method that uses mobile devices in the process. The following will describe digital learning innovations in several countries.

3.3.1. Indonesia

They decided to carry out online learning in several places because of the virus [32]. For students to carry out learning well, the Ministry of Education and Culture (MOEC) has prepared several supporting facilities that will be used to support the online learning process. MOEC develops distance learning applications through the "Rumah Belajar" portal (learning.kemdikbud.go.id.). This portal can be accessed using android/mobile or computer. This portal provides learning features for students and teachers available in learning resource materials, digital classes, virtual laboratories, and question banks from all levels of education from Early Childhood Education to Senior High Schools and Vocational Schools or equivalent. MOED collaborates with several learning platforms with accessible facilities and easy accessibility for users [33].

3.3.2. Malaysia

Hamzah in [34] describes that "Bestari Schools," or known as Smart Schools, are a new concept of online school in Malaysia. The Government proposed e-learning to society by mass promotion [35].

3.3.3. India

The Government of India initiated SWAYAM, which is the embodiment of online learning for various levels of Education. An online learning resource portal is also called e-Pathshala aimed at teachers, researchers, students, and parents.

3.3.4. Thailand

Education policies in Thailand are increasingly focused on sustainable learning that uses learning approaches and developments to strengthen concepts so that students can follow changes through ways of thinking and critical analysis to solve problems systematically and logically.

The government also provides opportunities for non-government organizations to participate in educational

programs and the evaluation process of teaching and learning [36]. Learning innovations in Thailand include the LMS Model, Microsoft Teams, Google Classroom, Self-Model, Techno Model, etc. [37]; SchoolNet, UniNet, and TCU [39-40].

3.3.5. The Philippines

President Rodrigo Duterte has decided on a new policy for education in the Philippines, namely the "no vaccine, no classes" policy. It impacts the learning process, which must be done online. The government has created modular learning – Self Learning Modules – which will make it accessible in various places, both online and offline.

3.4. Our Point Of View

From the various explanations given by the author, this paper will provide some highlights related to what is needed so that the Distance Learning process can prepare for maximum results. The points required are:

3.4.1. Student Readiness

Students must become active learners in the Distance Learning process to determine what students focus on and the learning materials provided, familiarize students with the new culture and minimize the adverse effects on the students because these are not an obstacle [41].

3.4.2. Teaching Skills

High teaching skills are needed to generate student motivation to achieve success even though learning is done online [42]. The government and the private sector often organize these training online. Teaching skills have a close relationship with teaching methods. The new learning method positively impacts student success in the distance learning model [43]. Hence, [44] emphasizes that teaching staff must immediately learn through training related to all aspects of learning.

3.4.3. Technological Skills

Both students and teachers must own mastery of this technical skill. This requirement becomes absolute law in the distance learning process.

4. CONCLUSION

Referring to the various existing explanations, the author emphasizes that in the implementation of digital learning, preparation is needed in different aspects, namely student readiness, teaching readiness, and technology readiness. If one of these aspects is still inadequate, then the practice of digital learning cannot be optimal. As the new of education face, digital learning must be prepared and possible to achieve optimal learning outcomes.

REFERENCES

[1]   A. R. &. G. Remuzzi, Covid-19 and Italy: what next? Lancet, vol. 395, no. 0, pp. 1225– 1228, 2020. DOI: https://doi.org/10.1016/S0140-6736(20)30627-9.

[2]   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. https://doi.org/10.46627/sipose.v1i1.9

[3]   S. Dhawan, Online learning: a panacea in the time of covid-19 crisis, Journal of Educational Technology Systems, Vol. 49(1), pp. 5–22, 2020. https://doi.org/10.1177/0047239520934018

[4]   S. Subedi, S. Nayaju, S. Subedi, S. K. Shah, J. M. Shah, Impact of e-learning during covid-19 pandemic among nursing students and teachers of Nepal, International Journal of Science and Healthcare Research, Vol.5, Issue: 3, 2020.

[5]   G. Basilaia., & D. Kvavadze, Transition to online education in schools during a sars-cov-2 coronavirus (covid-19) pandemic in Georgia, Pedagogical Research, Vol.5, Article No. em0060. 2020. https://doi.org/10.29333/pr/7937.

[6]   S. Murgatrotd, Covid-19 and online learning, Strategic Foresight for Educational Leaders, 2020. DOI:10.13140/RG.2.2.31132.85120

[7]   R. M. Simamora, The challenges of online learning during the covid-19 pandemic: an essay analysis of performing arts education students, Studies in Learning and Teaching, Vol.1, No 2, pp.86-103, 2020.

[8]   T. Sari., F. Nayır, Challenges in distance education during the (covid-19) pandemic period, Qualitative Research in Education, Vol. 9(3), pp. 328-360, 2020. Doi:10.17583/qre.2020.5872

[9]   S. Inchiparamban & S. Pingle, Massive open online courses (MOOCs): why do we need them? www.eric.ed.gov, India, 2020.

[10]   S. Dhawan, Online learning: a panacea in the time of covid-19 crisis, Journal of Educational Technology Systems, Vol. 49(1), pp. 5–22, 2020.

[11]   A. R. Nina, Paulo Freire‟s critical and dialogic pedagogy and its implications for the Bahraini

educational context, Educational Philosophy and Theory, (Article in press). 2020. https://doi.org/10.1080/00131857.2020.1716731

[12] N. Suprapto, U A Deta, N A Lestari, A Kholiq, A S Adam, H Mubarok and M N R Jauhariyah, Pre-service physics teachers' understanding on total lunar eclipse: A response of supermoon on January 31 st 2018, Journal of Physics: Conference Series, Vol. 1108(1), 012097, 2018.

[13] G. Fleming, 5 steps to writing a position paper, www.thoughtco.com, English, 2020.

[14] S. A. Sufian, N. A. Nordin, S. S. Nazar Tauji & M. Khalid M. Nasir, The impact of covid-19 on the Malaysian education system, International Journal of Academic Research in Progressive Education & Development, Vol. 9(2), pp. 764-7742020. DOI:10.6007/IJARPED/v9-i2/7659

[15] M. Hafez bin Kamarudin, N. Kamal bin Yeop Yunus, T. R. A. Tengku Razali, Pengaruh penerimaan teknologi dan budaya organisasi terhadap aplikasi bestarinet, Jurnal Dedikasi, Vol.14, pp. 181–218, 2020. http://myjms.moe.gov.my/index.php/jd/article/view/7984/3370.

[16] B.H. Online, 52 peratus pelajar Sabah tiada akses internet, w.bharian.com, Malaysia, 2020.

[17] J. Martinez, Take this pandemic moment to improve education, Edu Source, Retrieved from https://edsource.org/2020/take-this-pandemic-moment-to-improveeducation/633500. 2020.

[18] B. Ritesh, S. V. Kumar, N. Nithesh, K. C. Raghavendra, M. Prashant, K. Niranjan, Covid 2019 outbreak: the disappointment in Indian teachers, Asian J Psychiatry, 2020. DOI: https://doi.org/10.1016/j.ajp.2020.102047.

[19] I. Ali, Omar & M L Alharbi, Covid-19: disease, management, treatment, and social impact, Science of the Total Environment, Vol.728, pp.1-6, 2020.

[20] Y. Vanpetch, M. Sattayathamrongthian, The challenge and opportunities of Thailand education due to the covid-19 pandemic: a case study of Nakhon Pathom, Thailand, Web of Conferences 210, 18058. 2020. https://doi.org/10.1051/e3sconf/202021018058.

[21] W. Suebnusorn, Y. Chalamwong, Boosting education levels via a lift in teacher standards, accountability, Thailand Development Research Institute (TDRI)

[22] P. Title, S. Suthathip, K. Youji, C. Pornpimol, S. Thepchai, Effectiveness of e-learning design and affecting variables in thai public schools, Malaysian Journal of Learning and Instruction, Vol. 15, No. 1, pp.1-34, 2018.

[23] R. Lao, Pandemic is exposing the gaps in thai education, www.bangkokpost.com, Thailand, 2020.

[24] S. Kemp, Digital 2020: the Philippines, www.datareportal.com, Philippines, 2020.

[25] W. E. Copeland, et al., Impact of covid-19 pandemic on college student mental health and wellness, Journal of the American Academy of Child & Adolescent Psychiatry, Vol. 60, no.1, pp.134-141, 2021. DOI: 10.1016/j.jaac.2020.08.466

[26] A. Estrellan, K. J. Ferrariz, P. A. Lazona, V. E. Madres, J. C. Estrellan, E-learning amidst the pandemic: teachers' perspective in the Philippines, ASEAN Journal of Science and Engineering Education, Vol.1(2), pp. 93-96, 2021.

[27] Yoon, J., Kwon, S., & Shim, J. E, Present status and issues of school nutrition programs in Korea, Asia Pacific Journal of Clinical Nutrition, Vol.21(1), pp.128-133, 2012.

[28] H. Doris, P. Anja, K. Mareike, How teachers' self-efficacy is related to instructional quality: A longitudinal analysis, Journal of Educational Psychology, Vol. 105(3). 2013. Pp. 774-786.

[29] D. Kaklamanou, J. Pearce, & M. Nelson, Food and academies: a qualitative study, Department for Education, pp.1-23, 2012.

[30] N. Hockly, Substitute or redefine?, Modern English Teacher, Vol. 21(3), pp.40-42, 2012.

[31] Keane, D. T., Leading with technology, The Australian Educational Leader, Vol. 34(2), pp.44, 2012.

[32] 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," Studies in Philosophy of Science and Education (SiPoSE), Vol.1, No.1, pp. 38-49, 2020.

[33] Kemdikbud, Cegah sebaran covid19 di satuan pendidikan kemendikbud gandeng swasta siapkan solusi belajar daring, Kemdikbud, 20 March 2020. Available: https://kemdikbud.go.id.

[34] A. N., Tahir & I. Noorzali, Sedia hadapi kelas maya sesuai normal baharu, www.bharian.com, Malaysia, 2020.

[35] R. Ating, Challenges to learning and teaching in Malaysia in the time of covid-19, https://shapesea.com, Malaysia, 2020.

[36] N. Nithisunthornwit, Science development technology and innovation to increase the competitiveness of Thailand, Economic and Social Journal, Vol.57, 2020.

[37] Phraratsutaporn & L. Klomkul, Technological innovation for online learning during the situation of covid-19 pandemic in Thailand, Psychology and education, Vol. 58(1), pp.1578-1584, 2021.

[38] A. Saekow, & D. Samson, E-learning readiness of Thailand's universities comparing to the USA's cases, International Journal of e-Education, e-Business, e-Management and e-Learning, Vol. 1(2), 2012.

[40] C. Saengpassa, E-learning slow to progress in Thailand, www.nationwultimedia.com, Thailand, 2013.

[41] Firdaus, R. Muntaqo, E. Trisnowati, Analysis of student readiness for blended learning model implementation in industrial era 4.0, Ajose, Vol. 4, No.1, pp.48-56, 2020. DOI: 10.31002/ijose. v4i1.2309

[42] H. Burns, Teaching for transformation: (Re) Designing sustainability courses based on ecological principles, J Sustain Educ, Vol. 2, pp.1-15, 2011.

[43] T. Gonzalez, et al., Influence of covid-19 confinement on students' performance in higher education, www.journals.plos.org, Spain, 2020. https://doi.org/10.1371/journal.pone.0239490.

[44] UNESCO, Distance learning strategies in response to covid-19 school closures, UNESCO Digital Library. UNESCO. 2020.