International Journal of Instruction
e-ISSN: 1308-1470 ● www.e-iji.net

July 2021 ● Vol.14, No.3
p-ISSN: 1694-609X
pp. 771-786

Article submission code: 20200810030906

Received: 10/08/2020
Revision: 22/01/2021

Accepted: 14/02/2021
OnlineFirst: 12/06/2021

Elementary Teachers' Readiness toward the Online Learning Policy in the New Normal Era during Covid-19

Trisna Andarwulan
S.S., M.Pd., Faculty of Cultural Studies, Universitas Brawijaya, Indonesia, *trisna_aw@ub.ac.id*

Taufiq Akbar Al Fajri
S.S., M.Pd. Faculty of Administrative Science, Universitas Brawijaya, Indonesia, *fajri@ub.ac.id*

Galieh Damayanti
M.H., Faculty of Law, Universitas Brawijaya, Indonesia, *galieh@ub.ac.id*

Online-based learning system is a recent policy established by the Indonesian government in all schools as a result of Covid-19 pandemic. Shifting face to face schools with online learning-based system creates its own problems, mainly for elementary school teachers. This study aims to investigate the readiness of elementary school teachers towards the adoption of online-based learning policies during Covid-19. There are six indicators to measure teacher readiness, they are (1) availability of learning content, (2) availability of technological devices, (3) proficiency to apply the technology, (4) ability to purchase internet data, (5) availability of internet signals, and (6) student conditions. This research was conducted using descriptive quantitative method. Data was collected through a survey of 250 elementary school teachers in Indonesia. The results indicated that 50% of teachers were less available with the learning content; 24% of teachers had inadequate technology tools; 67.6% were less adapted at implementing technology; 20.4% were less able to buy internet data packages; 40.4% of teachers stated their problem finding internet signals and 53.2% of the students were less prepared for online learning. The research concluded that the teacher is not ready for the implementation of online learning policies.

Keywords: elementary school, teacher readiness, online learning, Covid-19, learning,

INTRODUCTION

Coronavirus disease 2019 (COVID-19) is a type of disease which is caused by a new virus, SARS-CoV-2 or commonly known as corona virus. The virus originating from Wuhan, China, is spreading fast that it shocks the whole world. Started in early 2020, 65 countries have been infected with the corona virus, one of which is Indonesia. The

Citation: Andarwulan, T., Al Fajri, T. A., & Damayanti, G. (2021). Elementary teachers 'readiness toward the online learning policy in the new normal era during covid-19. *International Journal of Instruction*, 14(3), 771-786. https://doi.org/10.29333/iji.2021.14345a

confirmed Covid-19 patients have provoked the government to act and eventually issued a state of disaster emergency started from 29 February 2020. The number of cases continues to grow as the virus spreads very quickly (Yuliana, 2020). The difficulties handling this epidemic have urged the Indonesian government to implement policies to prevent the widespread of COVID-19, by limiting social interaction (social distancing). Social distancing policy is highly influential in human life, one of which is in the field of education (Ibadurrahman, 2020).

In March 2020, the government instructed each school in Indonesia to close under certain conditions. Teaching and learning activities that initially performed through face-to-face interactions were switched to online learning system, where, teachers were expected to be able to provide teaching materials using remote digital devices. The online learning system that was supposed to end on September 2020, was inevitably prolonged until the next semester. Various problems arise due to the regulation, both internally and externally. The decision of the government to implement online learning activities over the next year lengthened the list of problems education dynamics.

The education system designed to cope with COVID-19 era is marked by "new normal." This expression was initially appeared in the business area. The phrase is used to remind economists to uplift their confidence that the industrial economy will return to normal after a recession (El-Erian, 2010). This term is used in different contexts to indicate the change of non-typical thing into typical. “New normal” as a situation after some intense changes occur. It replaces the accepted, habitual, usual state after certain events have occurred.

Several scientific papers have recently been published to address the multidimensional connections of the COVID-19 crisis along with the expected new normal period (for example, Sintema, 2020a and Toquero, 2020 on education; Usak et al., 2020 on social and psychological). From education perspective, there were studies that discuss the adoption of online modalities in instructional implementation during the COVID-19 pandemic (eg. See Sintema, 2020b on digital virtual class; Basilaia & Kvavadze, 2020 on online education; Naciri et al., 2020 on learning mobile; Mulenga & Marbán, 2020 about digital learning).

Technology-based or online learning emerges as the choice to implement teaching and learning process in the new normal era. The implementation of this learning is actually not a new thing. Prior to social distancing era, many educational institutions implemented online-based learning or blended learning (see Seage & Türegün, 2020). However, since the schools have been closed due to quarantine, the learning process is mostly or entirely performed using the online system. Various research findings explain that online-based learning has many advantages. Febriani et.al (2020) explains that online learning has a positive effect on students. Online learning can increase student creativity and independence. Teachers can innovate the use of social media and learning applications to approach the students, which can also be implemented as an alternative media in the learning process when the learning activities cannot be done through face to face interactions, in addition the students have more chances to have the access to many sources of learning web sites (Ramani, 2015, p. 5). The World Economic Forum

(2020) notes that online learning can be more effective in several ways. Some research shows that on average, students retain 25-60% more material when studying online, compared to only 8-10% in the classroom. This is because the students are being able to learn faster with online; e-learning requires 40-60% less time to study than in traditional classrooms where the students can learn at their own pace, repeat and re-read, skip over, or accelerate through concepts they choose.

Nevertheless, online learning policy in the new normal era is now becoming an 'ideal' that is difficult to do. In normal situations, many obstacles occur in implementing online learning (Assareh & Bidokht, 2011; Astri, 2017; Quadri, et.al., 2017). Many factors need to be prepared to support this achievement, both from the teacher and students, such as economic sufficiency, the availability of adequate facilities and infrastructure, internet networks, and skills to implement the technology (Mailizar, et.al., 2020; Zahara & Kirilova, 2020; Zamira & Linda, 2020). Organization for Economic Cooperation and Development/OECD (in Trade Union Advisory Comitee /TUAC, 2020) points out, important factors that determine the achievement of online learning, such as home education resources, availability of space, parental level education, parental fluency in the language of school teaching, parental digital competence, and parent involvement with school. In general, children from low socioeconomic households are at a disadvantage to exhibit learning at home.

This previous statement is in line with opinion of Fajrin (Hafizh, 2020), a counselling teacher in Lab school Jakarta, he stated that elementary has a long span, which is 6 years. The character diversity of elementary school students is varied. In addition, each region also has different demographic conditions. In fact, the characteristics can even differ from one region. The problem is if the parents are not at a good economic level. When parents work, no one accompanies the children to study, so it's a bit difficult to guide especially lower level elementary school students. The difficulty of connecting to the internet and other online learning facilities is very much felt by elementary schools located in rural areas or villages. Atik (Hafizh, 2020), a teacher at one of the elementary schools in Ciamis Regency, raised this concern. She said, it is very difficult to learn online or Distance learning. If it is applied in regions or villages (https://ayobandung.com/read/2020/07/15/106693/tantangan-belajar-daring-bagi-sekolah-dasar).

Based on the previous description, this research aims to analyze the readiness of elementary school teachers to implement the online-based learning in the new normal era during Covid-19. However, the success of implementing online learning in schools depends entirely on the teacher. Teachers must be intensively given the capacity with respect to their online learning readiness, as it is their expertise, skills and knowledge of technology and platforms that will enable them to play an important role in ensuring that online learning is achievable in all subjects.

METHOD

Research Design

In this study, the researcher implemented descriptive quantitative method. The descriptive quantitative is chosen to measure the readiness of elementary school teachers that implement online learning policies in a new normal era during Covid-19. The descriptive quantitative research design purpose is to describe and interpret, the current status of an individual, setting, condition, or event (Mertler, 2014). With descriptive quantitative research methods, this study aims to examine and define the existing situation (Sugiyono, 2018). By establishing this method, the researcher analyzed the average score of each variable and described the teacher's readiness for the implementation of online learning policies in the new normal era during Covid-19

Population and Sample of the Study

Population is a generating area that consists of objects that have certain qualities and characteristics determined by researchers to be studied and the conclusions to be drawn (Sugiyono, 2018). The population of this research is elementary teachers that spread in various provinces in Indonesia, such as East Java, Central Java, West Java, NTB, Bali, Kalimantan, South Sulawesi, Aceh, Maluku, Papua and West Sumatra who joined *Ikatan Guru Indonesia* (Association of Indonesian Teacher) or IGI. This group is selected since this group is the largest representative of teachers' association in Indonesia. The technique used in this study is random sampling. 250 teachers were selected from elementary level as the study sample (25 teachers have 0-5 years' experience, 100 teachers have 6-10 years' experience, 110 teachers have 11-15 year' experience, 15 teachers have 16-20 years' experience). Most participants are entitled to a bachelor's degree in education (240 teacher), while the rest have postgraduate degrees (10 teachers).

Table 1
Demographic background of participants

Demographic Background		Number of participants	Percentage
Gender	Male	88	35.2
	Female	162	64.8
Education	Undergraduate	240	96%
	Post-Graduate	10	4%
Teaching Experience	0-5 Years	25	10%
	6-10 Years	100	40%
	11-15 Years	110	44%
	16-20 years	15	6%

Research Instrument and Procedure

The research data collection technique was conducted using a questionnaire to measure teachers' readiness for the implementation of online learning policies in the new normal era during Covid-19. Elementary teachers' readiness toward the implementation of online learning policies in new normal era during covid-19 is measured by six indicators (adaptation of Assareh and Bidokht, 2011; TUAC, 2020), such as (1) availability of learning content, (2) availability of technological devices, (3) proficiency in applying

technology, (4) ability to purchase internet data packages, (5) availability of internet signals, and (6) teachers' attitude toward online learning. Likert scale is developed by Highhouse et al. (2003). Item validity test is implemented with SPSS program and the Bivariate Pearson correlation. The result indicates r count> r table (2-side test with sig 0.05), the question items correlate significantly to the total score, which means valid. The reliability value uses the Cronbach's Alpha test (Highhouse et al., 2003, p. 995). Followings are the results of reliability of the instrument trials test that are subject to 250 respondents of elementary school teachers.

Table 2
Data reliability test results

Reability Statistics	
Cronbach Alpha	N of Items
.626	6

The data will be reliable if value of Cronbach's Alpha > r-table is 0.124 with N = 250. Likewise, Cronbach's Alpha coefficient is more than 0.124, meaning the instrument used is reliable.

Data Collection and Data Sources

The data was collected with online questionnaires. The online questionnaire was chosen since all teachers must teach their students from home. Moreover, the online questionnaire was also easy to be administered and accessed using various devices (Fraenkel et al., 2011). The questionnaires were allocated to all of the participants after all schools in Indonesia is closed due to the Covid-19 and the teaching and learning is implemented with e-learning methods from home. The majority of participants were contacted via WhatsApp groups and email, while some of the participants being approached through direct letter to their school and personal email. The link of the questionnaires is hosted by Survey Monkey. The questionnaire was open for 2 weeks.

Data Analysis

Researchers distributed invitations and questionnaires to a number of elementary teachers who becomes the member of IGI. A 5-point scale is used to measure the teachers' readiness. The research questions were analysed with descriptive and inferential statistical analysis. Regarding descriptive analysis, a mean and standard deviations of responses for all the items of readiness were calculated and presented in tables. For inferential statistical analysis, a repeated measure of ANOVA was employed to examine significant differences in barrier across the categories.

FINDINGS

Elementary teachers' readiness toward the implementation of online learning policies in a new normal era during covid-19 is measured by six indicators (adaptation of Assareh and Bidokht, 2011; TUAC, 2020), such as (1) availability of learning content, (2) availability of technological devices, (3) proficiency in applying technology, (4) ability to purchase internet data packages, (5) availability of internet signals, and (6) Teachers' attitude toward online learning. The measurement results of each indicator are described below.

Availability of Learning Content

Based on the results of measurements on 250 elementary teachers who joined IGI, 22.4% respondents stated that learning content was not available, 50% respondents stated that learning content was insufficently available, 24% respondents stated that learning content was sufficiently available, 3.2% respondent stated learning content was available, and 0.4% respondents stated that content learning was very available. The data suggests that the majority of the availability of learning content on primary school level teacher learning content is still lacking. The following table describe the calculation of learning content data.

Table 3
Availability of learning content

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not available	56	22.4	22.4	22.4
	Less available	125	50.0	50.0	72.4
	Sufficiently available	60	24.0	24.0	96.4
	Available	8	3.2	3.2	99.6
	Very available	1	. .4	.4	100.0
	Total	250	100.0	100.0	

Availability of Technological Devices

Based on the results of measurements on 250 elementary school teachers, 24% respondents stated that technology equipment was less available, 71.6% respondents stated that technology equipment was sufficiently available, and 4.4% respondents stated that technology equipment was available. The findings suggest that the majority of elementary school teacher stated that availability of technological devices was sufficiently available. The following table showed the calculation of the availability of technological devices.

Table 4
Availability of technology devices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not available	60	24.0	24.0	24.0
	Sufficiently available	179	71.6	71.6	95.6
	Available	11	4.4	4.4	100.0
	Total	250	100.0	100.0	

Proficiency in Applying Technological Devices

Based on measurement results of 250 elementary school teachers, 67.6% respondents stated that they were less adept at implementing technology, 28.8% were quite adept at applying technology, and 3.6% were adept at implementing technology. From these data, it is shown that the majority of elementary school level teachers are less proficient to apply the technology. The following table describes the calculation of data regarding the ability of elementary teachers in implementing technology.

Table 5
Proficiency in applying technological devices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not proficient	169	67.6	67.6	67.6
	Quite proficient	72	28.8	28.8	96.4
	Proficient	9	3.6	3.6	100.0
	Total	250	100.0	100.0	

Meanwhile, based on the type of technology application used in online learning, the elementary school teachers use technology applications such as WhatsApp (WA), Facebook, Zoom meeting, Google Meet, Google Form, and Webex, while the rest are still working offline. From 250 elementary school teachers, 9 teachers used the Zoom meeting application, Google Meet, WhatsApp (WA), and Google Form, 72 teachers used the WhatsApp (WA) application and Google Form, 119 teachers used the WhatsApp (WA) application and / or Google Form, and 50 teachers used WhatsApp (WA) or offline.

Capability on Purchasing Internet Data Packages

Based on the measurement results on 250 elementary school teachers, 20.4% of teachers were less able to provide funds for internet data purchases and 79.6% of teachers were quite capable of providing funds for internet data purchases. The data signifies that the majority of elementary school teachers are quite capable to provide funds to purchase internet data packages. The following table describe the calculation of data on the ability of elementary school teachers to provide funds for purchasing internet data packages.

Table 6
Capability of purchasing internet data packages

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less capable	51	20.4	20.4	20.4
	Quite capable	199	79.6	79.6	100.0
	Total	250	100.0	100.0	

Availability of Internet Signals

Based on the measurement results on 250 elementary school teachers, 0.4% of teachers did not find an internet signal, 40.4% stated that they found it quite hard to find internet signals, 54% of teachers stated they quite easily found internet signals, and 5.2% of teachers easily found internet signals. This suggests that most elementary school teachers are quite easy to found internet signals. The following table describes the calculation of data on the availability of internet signals / networks.

Table 7
Availability of internet signals

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not available	1	.4	.4	.4
	Less available	101	40.4	40.4	40.8
	Quite available	135	54.0	54.0	94.8
	Available	13	5.2	5.2	100.0
	Total	250	100.0	100.0	

Teachers' attitude towards online learning

The teacher's attitude is an indicator to determine the readiness of teachers to face online learning during the COVID-19 era. Based on the measurements results on 250 elementary school teachers, 36.8% stated that they have positive feeling toward online learning, 20% of teacher is neutral toward online learning, 43.2% teachers stated that they feel negative toward online learning. The following table is the calculation detail of teachers' attitude toward online learning.

Table 8
Student conditions about online learning based on teacher's views

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Positive	92	36.8	36.8	36.8
	Neutral	50	20	20	56.8
	Negative	108	43.2	43.2	100.0
	Total	250	100.0	100.0	

DISCUSSION

This research aims to measure the readiness of elementary school teachers on the implementation of online learning policies in the new normal era of during covid-19. There are six indicators to measure the readiness of elementary school teachers towards the implementation of online learning policies in the new normal era post covid-19, such as (1) availability of learning content, (2) availability of technological devices, (3) proficiency to apply technology devices, (4) capabilities to purchase internet data packages, (5) availability of internet signals, and (6) teachers' attitude toward online learning.

Availability of Learning Content

Learning content is an important element to implement learning. Content acts as the core media in the teaching and learning process. Good content contains a combination of explicit knowledge and tacit in the learning process. Explicit knowledge is knowledge that is summarized in form of documentation so that it is easily understood and disseminated, while tacit is absorbed in the brain / mind based on personal experience and it is difficult to communicate with people who have never experienced that knowledge before (Anumba et.al., 2005). Referring to the preparation of the implementation of online learning in the new normal era, the learning content used certainly does not merely contain material content that is still conventional / traditional, it combines material content with technology applications. In fact, there are still many teachers who have not maximized the use of technology applications in making learning content. The results suggest that 50% of elementary school teachers have insufficient learning content. This certainly appears an obstacle that can hinder teaching and learning activities. Learning content related to learning objects. Learning Object in the form of small paragraphs along with an explanation or mostly as a complete tutorial can be presented through various media, including text, graphics, animation, audio, and video (Chikh, 2014). Learning objects support active learning strategies (case-based,

problem, generative, collaborative, etc.) rather than treating students as collections in static lessons (Chikh, 2014).

Availability of Technology/Digital Devices

The mandatory policy of online learning has encouraged elementary school teachers to utilize their existing information and communication technology. Information and communication technology that can be used in learning activities includes computer media with the internet, mobile phones with various applications, video, telephone or fax. Through the facilities provided by the system, learners can learn anytime and anywhere without being limited by distance, space and time. Learning material is more varied, not only in verbal form, but also in form of text, visuals, audio, and motion (Munir, 2017). Based on the results of the study, 71.6% of elementary school teachers in Indonesia stated that technological devices are sufficiently available. The data indicates that teachers are ready to use technological devices as online learning media. The technological devices used by teachers in teaching and learning activities are in the form of computers with internet and mobile networks. However, the use of technological device is not flawless. When using digital devices in learning activities, new problems arise. Various opinions say that the use of applications in technological devices may entail access insecurity, data plagiarism or even data theft. Therefore, the use of technological device needs to be supported by the security of its use.

Distance learning cannot be separated with digital protection and literacy. When relying heavily on digital tools in learning, additional requirements must be met. Distance learning demands appropriate software (eLearning platforms, video conferencing tools, learning applications), copyrights for learning content, e-learning knowledge by teachers and students, and communication between teachers and students and equipped with digital security, data privacy and protection risks. Protecting student and teacher personal information and data is vital. The same applies to digital risks to protect children who use access digital device, not to mention prevention of hoax (in TUAC, 2020).

Proficiency in Applying Technological Devices

Proficiency in applying technology that must be mastered by elementary school teachers when implementing online learning. The availability of technological devices without the ability to implement will become obstacles in teaching and learning activities. Despite the many social media that provide tips on using a media, there are still many teachers who have not mastered it. Based on the results of the study, 67.6% of teachers are less adept at implementing technology (Mailizar, et.al., 2020; Purwanto, dkk., 2020; Zaharah & Kirilova, 2020). This is natural because teaching and learning in Indonesia is mostly conducted through face-to-face interactions. In fact, based on the survey some teachers are implementing offline learning during COVID-19 pandemic era due to various limitations that both teachers and students have. Purwanto, et al. (2020) explains some impact of COVID-19 on teachers such as those who are not accustomed to the culture of distance learning / online; not all teachers are adepted at using internet

technology, and other social media; inadequate facilities and infrastructure; they require additional expenditure for purchasing internet packages.

Ability to Buy Data Packages

Technology will not run smoothly without internet support. High speed and stable internet network certainly require a lot of data packages. In this covid-19 era, teachers are inevitably forced to set allocate some of their funds to purchase internet data packages. This is done so that communication with teachers and students can run smoothly, and the learning process can be carried out. Research findings suggest that 79.6% are quite able to buy internet data packages. However, this data is the basis that not all teachers are able to even be ready to provide additional funds to purchase data packages.

The previous statement is in line with research conducted by Purwanto, et.al., 2020) which states that the obstacle faced by teachers is the addition of internet package costs. To learn online for several months, of course more quotas will be needed and will automatically increase the cost to purchase the internet quota. Indirectly, this is certainly a burden for teachers because not all teachers are in an established economic condition. Not all Indonesian teachers are civil servant teachers. There are still many elementary school teachers who have the status of honorary teachers. Although the government has allowed the BOS budget to be used to support the implementation of online learning, it is unlikely to be known how long it has been used. In this condition, the teacher faces a separate dilemma.

Availability of Internet Access/Network

Another factor that has also become a concern to the implementation of online learning in the new normal postcovid-19 era is the availability of the internet access. Good internet network will certainly facilitate the smooth process of teaching and learning. Meanwhile, if the signal is bad, it will certainly hamper the teaching and learning process. Based on the results of the study showed that 54% of teachers stated that they easily can access the internet signal. Nevertheless, this data is the basis for evaluating that there are still many teachers who have difficulty in accessing internet signals. Internet signal access for teachers who live in urban areas may be easier than teachers who live in rural / remote areas

Teachers' attitude toward Online learning

Another important factor in the implementation of online learning is teacher attitude toward online learning. According to Keramati, et.al. (2011), there are three levels that need to be considered regarding online learning readiness, one of which is pedagogical readiness. Pedagogical readiness focuses on understanding of technology and experience, teacher self-confidence and attitudes (Akaslan & Law, 2011). Sammak, et.al. (2010) emphasize that pedagogical readiness is related to teachers 'perceptions of electronic learning systems, and evaluates teachers' ability to embrace new technologies to complete different related tasks.

Most teachers still consider that face-to-face learning is more effective than online learning. Through face-to-face teaching and learning, students get values that cannot be obtained through online learning. These values include the process of social, cultural, ethical and moral maturity, which can only be obtained through social interaction in an area of education. This is in line with the view of Loch, et.al. (2014) which states that there are two main reasons e-learning is difficult to achieve in developing countries, they are related to rituals and cultural differences that make it happen; and applicable country policies and regulations that facilitate or hinder technology transfer. This attitude is also supported by research findings that show that teachers have difficulty and feel stuttering in applying technology. This shows that teachers lack positive attitudes towards online learning. When one component is not connected to other components, learning certainly cannot run smoothly.

Every teacher must always have a positive attitude in learning, especially in the current state of COVID-19. Teachers with positive attitudes towards ICT will tend to use ICT in learning (Atkins & Vasu, 2000). With this positive attitude, teachers are encouraged to always improve their competence in using ICT.

Considering BPS data (2019) might be an advantage in regards of the internet use among the students. Referring to the data, the use of cell phones by urban students is higher than students in rural areas which is 76.60 percent compared to 64.69 percent. Meanwhile the percentage of students who use computers / PCs in urban areas is doubled compared to students in rural areas which is 31.37 percent compared to 15.43 percent. While the percentage of internet use of students in urban areas (62.51 percent) is higher than in rural areas (40.53 percent). Nationally, there are 53.06 percent of students aged 5-24 who use the Internet.

Referring to the various findings of the problems faced by teachers in the implementation of online learning; teachers, parents, schools, education offices, and the government need to work together to create strategies in implementing effective learning in the new normal era of during COVID-19. According to TUAC (2020) there are several steps that can be prepared for online learning scenarios in the new normal era during COVID-19.The mid-term steps needed for online learning scenarios in the new normal era during COVID-19: (1) rearranging the curriculum, transferring important content to the school next year, extending time to work on core topics, (2) installing general summer school programs voluntarily (low threshold services) and general guidance services for the next school year, (3) implementing individual assistance for students at risk in schools to compensate for the difficulties resulting from school closures (TUAC, 2020). The long-term steps for online learning scenarios in the new normal era during COVID-19 are: (1) developing a general launch in student-centered learning and individual assistance, (2) strengthening student support systems, (3) rethinking copyright parameters in learning content, for example by being loosened for educational use which is defined as open resources, (4) building learning content and structures for e-learning and student-centered learning systematically (TUAC, 2020).

In line with the previous statement, Daniel (2020) offers a number of pragmatic guidelines to teachers and other relevant agencies in efforts to manage education in the

covid-19 pandemic period. Several things were highlighted by Daniel (2020), such as about the preparation that the system could make; the necessity of students at various levels and stages; guarantees to students and parents; simple approach to distance learning; curriculum, assessment post Covid-19, and useful resources. Teachers should not only continue to teach student directly with the class curriculum and assessments / examinations, but also maintain students' interest in learning by giving them a variety of assignments. Teachers can utilize many of the quality learning materials that are now available as open educational resources that can be used freely. The Open Learn website, for example, contains more than 1,000 courses at the school and college level. There is no shame in teaching through good materials prepared by others (Daniel, 2020).

Teachers have urgency in increasing millennial human resources. Teachers are seen as agents to be able to integrate global issues and teaching and learning in the classroom. Teachers must have the ability to use smartphones (other gadgets) and the internet is the most powerful source of information. They can also create or implement educational applications and social media as a tool to involve students in their learning (Norahmi, 2017). However, Vo, et all (2020) states that in Blended learning in facilitating students' individual learning, self-regulation is still the main concern. This can affect the instructors' decision regarding how to organize and design online learning activities aimed at individual or group study. Despite the facility provided by the teacher, understanding the students' ability is necessary

Some of the research and policies that mentioned before can at least become the answer to the problems related to the education system, which are experienced by local governments, schools, and teachers. This policy allows the teachers to teach the way what they want in this new normal era through online, offline, or a combination of both, and adjust the conditions and availability of their respective learning facilities. To ensure the implementation of good learning practices for students and teachers at the technical level, the role of the Head of Education Unit or Principal is required to guide and monitor teacher's tasks through learning reports to ensure facilities and infrastructure owned by teachers, to ensure the system learning that is easily accessible to all students, and to provides regular reports to the Education Office.

CONCLUSION

This research focuses on elementary teacher readiness toward online learning. Teacher readiness can be measured by 6 indicators, such as: availability of learning content, availability of technological devices, proficiency in applying technological devices, the ability to buy data packages, availability of internet access and teachers' attitude toward online learning. It concludes that the majority of elementary school teachers in several regions of Indonesia's provinces are not ready for the implementation of online learning policies in the new normal era of during COVID-19. Based on the results of teacher readiness, serious attention needs to be taken immediately by education officials if the goal is to provide targeted and quality online learning to students in a rapidly changing world. In addition, teachers should organize themselves more systematically in pursuing technology-based learning which they think is most useful. The mechanisms that have

been implemented will certainly provide benefits for continuing educational missions and training in times of crisis such as COVID at this time.

RECOMMENDATIONS

The reason behind this research is to provide an overview of the readiness of elementary school teachers in Indonesia for the implementation of online learning policies in the new normal era of Post covid-19. The results of the research will serve as recommendations to school management, the education department, and policy makers in general to re-examine the implementation of online learning in the curriculum in Indonesia, especially at the elementary school level. While curriculum arrangements, student assistance arrangements, and content arrangements and online learning structures need to be considered to meet student needs. The results of this study motivated a series of new investigations. For example, other researchers can conduct studies on the vision and mission of digitizing education in the new normal era or qualitative studies on the effectiveness of online learning in the new normal era of post covid-19.

REFERENCES

Akaslan, D. & Law, E.L.C. 2011. Measuring teachers' readiness for e-learning in higher education institutions associated with the subject of electricity in Turkey. Paper presented at the IEEE EDUCON Education Engineering Conference, Amman, Jordan. https://doi.org/10.1109/EDUCON.2011.5773180

Anumba, C., Egbu, C., dan Carrillo, P. (2005). *Knowledge management in construction*. UK: Blackwell Publishing Ltd

Assareh, A., & Bidokht, M. H. (2011). Barriers to e-teaching and e-learning. *Procedia Computer Science, 3*, 791-795. https://doi.org/10.1016/j.procs.2010.12.129

Astri, L. Y. (2017). Barrier factors that influence satisfaction of e-learning: A literature study. *Advanced Science Letters, 23*(4), 3767-3771. https://doi.org/ 10.1166/asl.2017.9007

Atkins, N.E. & Vasu, E.S. (2000). Measuring knowledge of technology usage and stages of concern about computing: A study of middle school teachers. *Journal of Technology and Teacher Education, 8*(4), 279-302. Charlottesville, VA: Society for Information Technology & Teacher Education

Basilaia, G., & Kvavadze, D. (2020). Transition to online education in schools during a SARS-CoV-2 Coronavirus (COVID-19) pandemic in Georgia. Pedagogical Research, 5(4), em0060. https://doi.org/10.29333/pr/7937

BPS. (2019). Potret pendidikan statistik pendidikan Indonesia 2019 [Portrait of Indonesian education statistics education 2019]. Badan Pusat Statistik Jakarta [Jakarta Central Bureau of Statistics]. Retrieved July 2, 2020 from https://www.bps.go.id/publication/2019/11/29/1deb588ef5fdbfba3343bb51/potretpendidikan-statistik-pendidikan-indonesia-2019.html

Chikh, Azeddine. (2014). A General model of learning design objects. *Journal of King Saud University - Computer and Information Sciences 26*(1), 29–40. https://doi.org/10.1016/j.jksuci.2013.03.001

Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects* (2020). https://doi.org/10.1007/s11125-020-09464-3

El-Erian, Mohamed. (2010). Navigating the new normal in industrial countries. International Monetary Fund. December 15, 2010. Retrieved June 27, 2020 from http://www.perjacobsson.org/lectures/101010.pdf

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education (8th ed.)*. McGraw-Hill

Febriani, Suci Ramadhanti, Rizka Widayanti, M. Afif Amrullah, Nuril Mufidah. (2020). Arabic learning for elementary school during Covid-19 emergency in Indonesia. *OKARA: Jurnal Bahasa dan Sastra*, *14*(1), May 2020. http://ejournal.iainmadura.ac.id/index.php/okara/article/download/3194/1781

Handayani, N. (2017). Becoming the effective english teachers in the 21st century: What should know and what should do? *1st English Language and Literature International Conference (ELLiC), 1*(16), 156–64. https://jurnal.unimus.ac.id/index.php/ELLIC/article/view/2463

Hafizh, M. N. 2020, July 15. Tantangan belajar daring bagi sekolah dasar [Online learning challenges for elementary schools]. Retrieved October 9, 2020 from https://ayobandung.com/read/2020/07/15/106693/tantangan-belajar-daring-bagi-sekolah-dasar

Ibadurrahman, M. A. (2020). *Corona virus: Asal usul, penyebaran, dampak, dan metode pencegahan efektif pandemi COVID-19* [The origin, spread, impact and effective prevention methods of the COVID-19 pandemic]. Health & Fitness

Kasih, A. P. (2020, April 25). Bila belajar di rumah diperpanjang, Nadiem: Tak harus online dan akademis [When studying at home is extended, Nadiem: It doesn't have to be online and academic]. Retrieved July 2, 2020 from https://www.kompas.com/edu/read/2020/03/25/154226271/bila-belajar-di-rumah-diperpanjang-nadiem-tak-harus-online-dan-akademis?page=all

Keramati, A., Afshari-Mofrad, M. & Kamrani, A. 2011. The role of readiness factors in e-learning outcomes: An empirical study. *Computers and Education, 57*(3), 1919–1929. https://doi.org/10.1016/j.compedu.2011.04.005

Loch, K., Straub, D. & Sevick, G. 2014. *IT transfer to Egypt: A process model for developing countries*. Unpublished document, National Science Foundation Proposal Number 0082473

Surat Edaran Kemendikbud No 4 Tahun 2020 mengenai *pelaksanaan pendidikan dalam masa darurat corona virus disease* (Covid-19) [Ministry of Education and Culture Circular No. 4 of 2020 regarding the implementation of education in the emergency

period of the corona virus disease (Covid-19)]. *Ministry of Education and Culture*. Retrieved July 1, 2020 from https://www.kemdikbud.go.id/main/blog/2020/03/mendikbud-terbitkan-se-tentang-pelaksanaan-pendidikan-dalam-masa-darurat-covid19

Seage, S.J., & Türegün, M. (2020). The effects of blended learning on STEM achievement of elementary school students. *International Journal of Research in Education and Science (IJRES)*, 6(1), 133-140. https://doi.org/10.46328/ijres.v6i1.728

Surat Edaran Sekretaris Jenderal Mendikbud Nomor 15 tahun 2020 tentang Pedoman Pelaksanaan Belajar dari Rumah dalam Masa Darurat Penyebaran Coronavirus Disease (Covid-19) [Circular of the Secretary General of the Minister of Education and Culture Number 15 of 2020 concerning Guidelines for Implementing Learning from Home in an Emergency for the Spread of Coronavirus Disease (Covid-19)]. *Ministry of Education and Culture.* https://www.kemdikbud.go.id/main/blog/2020/05/kemendikbud-terbitkan-pedoman-penyelenggaraan-belajar-dari-rumah

Mailizar. (2018). *Investigating Indonesian teachers' knowledge and use of ICT in mathematics teaching.* (PhD), University of Southampton, Southampton, UK. https://eprints.soton.ac.uk/424734/

Mertler, C. A. (2014). *Action research: Improving schools and empowering educators (4th ed.)*. SAGE

Mulenga, E. M., and José M. Marbán. (2020). Is COVID-19 the gateway for digital learning in Mathematics education? *Contemporary Educational Technology, 12*(2), ep269. https://doi.org/10.30935/cedtech/7949.

Munir. (2017). *Pembelajaran digital* [Digital learning]. CV Alfabeta

Naciri, A., Baba, M. A., Achbani, A., & Kharbach, A. (2020). *Mobile learning in higher education: Unavoidable alternative during COVID-19*. *Aquademia*, 4(1), ep20016. https://doi.org/10.29333/aquademia/8227

Norahmi, M. (2017). 21st-Century teachers: The Students' perspectives. The Students' Perspectives. *Journal on English as a Foreign Language, 7*(1), 77-96. http://e-journal.iain-palangkaraya.ac.id/index.php/jefl

Purwanto, A., Pramono, R., Asbari, M., Hyun, C., Wijayanti, L., Putri, R., & Santoso, P. (2020). Studi eksploratif dampak pandemi COVID-19 terhadap proses pembelajaran online di sekolah dasar [An exploratory study of the impact of the COVID-19 pandemic on the online learning process in elementary schools]. *EduPsyCouns: Journal of Education, Psychology and Counseling*, *2*(1), 1-12. Retrieved from https://ummaspul.e-journal.id/Edupsycouns/article/view/397

Quadri, N. N., Muhammed, A., Sanober, S., Qureshi, M. R. N., & Shah, A. (2017). Barriers effecting successful implementation of e-learning in Saudi Arabian Universities. *International Journal of Emerging Technologies in Learning (iJET), 12*(06), 94-107. https://doi.org/10.3991/ijet.v12i06.7003

Ramani, S. (2015). The internet and education in the developing world – hopes and reality: Smart learning environment. *iTech Digest: International Electronic Newsletter, 5(3), 2-16. Retrieved July 2, 2020 from https://c.ymcdn.com*

Sammak, M.S., Baghbel, M. & Samancioglu, M. 2010. Technology readiness of primary teachers: A case study in Turkey. Procedia Social and Behavioral Sciences, *2*(10), 2671–2675. https://doi.org/10.1016/j.sbspro.2010.03.393

Sintema, E. J. (2020a). Effect of COVID-19 on the performance of grade 12 students: Implications for STEM education. *Eurasia Journal of Mathematics, Science and Technology Education*, *16*(7), em1851. https://doi.org/10.29333/ejmste/7893

Sintema, E. J. (2020b). E-Learning and smart revision portal for Zambian primary and secondary school learners: A digitalized virtual classroom in the COVID-19 era and beyond. *Aquademia*, *4*(2), ep20017. https://doi.org/10.29333/aquademia/8253

Sugiyono. (2018). *Metode penelitian kuantitatif, kualitatif, dan R&D* [Quantitative, qualitative, and R&D research methods]. Alfabeta

Toquero, C. M. (2020). Challenges and opportunities for higher education amid the COVID-19 pandemic: The Philippine context. *Pedagogical Research*, *5*(4), em0063. https://doi.org/10.29333/pr/7947

TUAC. (2020). Impact and implications of the COVID 19-crisis on educational systems and households. Retrieved from tuac@tuac.org

Usak, M., Masalimova, R. A., Cherdymova, I. E., & Shaidullina, R. A. (2020). New playmaker in science education: Covid-19. *Journal of Baltic Science Education*, *19*(2), 180-185. https://doi.org/10.33225/jbse/20.19.180

Vo, M.H., Zhu, C., & Diep, A.N. (2020). Examining blended learning implementation in hard and soft sciences: A qualitative analysis. *International Journal of Research in Education and Science (IJRES*), *6*(2), 250-272. https://doi.org/10.46328/ijres.v6i2.868

Word Economic Forum. (2020, April 29). The Covid-19 pandemic has changed education forever. This is how. Retrieved from https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/

Yuliana. (2020). Corona virus diseases (Covid-19). *Wellness and healthy magazine*. *2*(1), 187-192. https://wellness.journalpress.id/wellness/article/view/21026/pdf

Zaharah, Z., & Kirilova, G. I. (2020). Impact of corona virus outbreak towards teaching and learning activities in Indonesia. *SALAM: Syar-i Social and Cultural Journal, 7*(3). https://doi.org/10.15408/sjsbs.v7i3.15104

Zamira, H. D., Linda, H. (2020). *The impact of COVID-19 on education and on the well-being of teachers, parents, and students: Challenges related to remote (online) learning and opportunities for advancing the quality of education*. Retrieved July 9, 2020 from https://www.researchgate.net/publication/341297812