COVID-19 PANDEMIC: THE INFLUENCE OF FULL-ONLINE LEARNING FOR ELEMENTARY SCHOOL IN RURAL AREAS

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Article Info	**Abstract**
	The Indonesian government launched an online learning program in the education area to break the chain of the coronavirus (covid-19) spreading. But, online learning requires more facilities such as internet access and smartphone/notebook which is not all equipped in rural areas. Therefore, this research has aimed to know the situation of the online learning process in rural areas during the co-19 pandemic. The research was conducted in Purwosari sub-district, Bojonegoro district, East Java with 53 of elementary school teachers as the participant. Online questionnaires that consist of 5 statements were used to collect the data. This research showed that the Whatsapp group was the famous platform for online learning. Besides that, the teachers have been facilitated by the school in online learning. On the other hand, internet access, learning innovation, and students' facilities for online learning become obstacles in online learning in rural areas. **Keywords:** covid-19; learning process; elementary school; rural area

A. Introduction

Coronavirus disease 19 as known as COVID-19, is one type of virus that is currently waging all countries in the world. The rapid spread of the virus causes countries in the world to do everything to break the chain of the virus. Indonesia is a country that was affected by the virus (Setiawan and Iasha 2020). To break the chain of covid-19 spread in the education area, the government established the regulations where learning is done online (CNN 2020). So the conventional learning model such as Jigsaw cooperative learning (Sulfemi and Kamalia 2020), discovery learning (Setiawan and Suhandi 2020), physical games (Sunaryo et al. 2020), and others, were not used during the covid-19 pandemic.

Online learning is a kind of learning method that is conducted using the internet so teachers and students do not need to face-to-face in the learning process (Stoetzel and Shedrow 2020). Online learning can be done using various electronic devices that are connected to the internet such as notebook, tablets, and smartphones. (Setiawan et al. 2017). But in online learning, the devices cannot be used directly because it requires supporting software such as Google Classroom, moodle, Zoom Meeting, and others.

Some research about the use of software used in online learning has been done. Kumar et al. in their research reported the use of google classroom as an online learning media. According to Kumar et al., Google classroom could make online learning more easily because it was inexpensive and easy to use (Kumar, Bervell, and Osman 2020). Murti Kusuma et al. also reported the use of Google classroom in their online learning (Murtikusuma et al. 2019).

Besides of google classroom, moodle could also be used as an online learning media. Sabah reported in his research that the use of moodle in online learning can increase students' learning motivation (Sabah 2019). Similar to the research by Teo et al., moodle could be an online learning media to increase theoretical understanding (Teo et al. 2019). On the other hand, Malckzyk et al. and Tesar et al. used zoom meetings in online learning. Online learning using Zoom meeting could give flexibility in the learning process and increase the

students' motivation (Malczyk 2019; Tesar 2020).

Basically, online learning can be used in the learning process during the covid-19 pandemic. However, online learning requires more facilities such as internet access and a smartphone or notebook. What if the internet infrastructure facilities are inadequate like in rural areas? Can the learning process still work? According to the data from Budianto et al., only 48.3% of rural areas have been connected to the internet and the other is still having difficulty accessing the internet (Budiyanto, Jamil, and Rahayu 2019; Madiawati 2019). On the other hand, only some of all elementary school students in rural areas are equipped with a smartphone/notebook. This can disrupt the learning process especially elementary school in rural areas during the covid-19 pandemic because the learning process utilizes internet access and a smartphone/notebook for online learning.

From this explanation, the researchers wanted to find out how the conditions of the learning process in rural areas during the covid-19 pandemic. Therefore, the research will discuss the learning process situation in rural areas during the covid-19 pandemic.

B. Research Methodology

The method used is a descriptive qualitative analysis method (Creswell, 2014). Selection of materials will be used as analysis material, namely Sundanese children's games called *kakawihan* and *kaulinan*. The form of the game is the game of the *oray-orayan, endog-endogan, cingciripit, slepdur, perepet jengkol, ucang-ucang angge, paciwit-ciwit lutung*, and *sasalimpetan*.
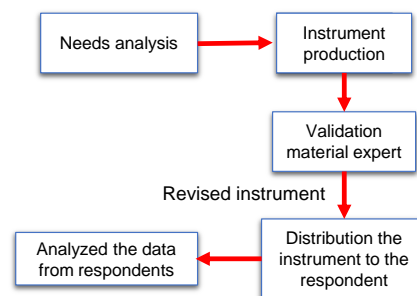
Research Design

Figure 1. The flowchart steps of this research

The aim of this research is to known the learning process situation in rural areas during the covid-19 pandemic. This

research used a qualitative descriptive method. The distribution of online questionnaires was conducted from June 8th – 20th, 2020

Participant

The participant of this research was the elementary school teachers that located in the Purwosari sub-district, Bojonegoro district, East Java (figure 2(a)). The number of participants was 53 elementary school teachers that consist of 33.96% male and 66.04% female (figure 2(b)).
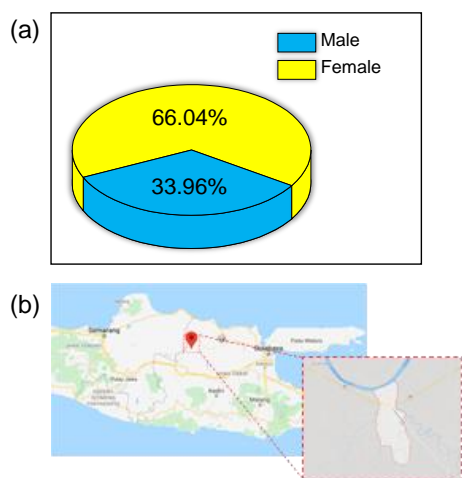

(a)

(b)

Figure 2. (a) The number of participants on each gender and (b) the location of this research.
Instrument

In this research, online questionnaires were used to get the data. The online questionnaires were separated into 5 statements covering the experience of elementary school teachers in the learning process during the covid-19 pandemic. The statement of each questionnaire was shown in table 1. The answer to this questionnaires was in the form of a Likert scale with 5 categories, namely: (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly Agree.

Table 1. The online survey questionnaires

No.	Statements
1	what kind of media was used in online learning during the covid-19 pandemic?
2	The school give me the facilitates in the online learning process
3	Signal quality is my problem in implementing online learning
4	During online learning, I often giving assignments instead of delivering course material
5	Students already have enough facilities in online learning during the covid-19 pandemic

B. Research Result and Discussion

What kind of media was used in online learning during the covid-19 pandemic?

Media has an important role to facilitate teachers and students in the online learning process during the covid-19 pandemic. In this research, the participant was given the question about the kind of media that they chose in the learning process during the covid-19 pandemic. The participants were given several kinds of media that could be chosen more than one option. The media that were given to the participant namely, Whatsapp group, Google classroom, Zoom meeting, Moodle, Telegram, and others.
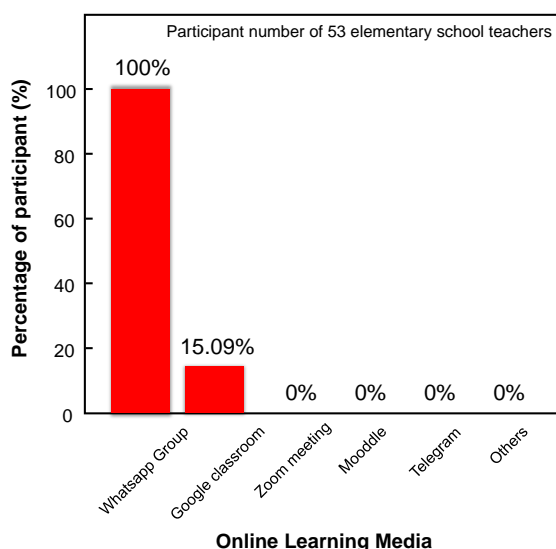

Figure 3. **The percentage of each media users compared to the number of participants.**

Whatsapp group was the famous platform that was used by elementary school teachers in rural areas especially in the Purwosari sub-district. It can be seen by the data in the figure 3 that 100% of the respondent was used Whatsapp group in the learning process. The many uses of Whatsapp groups as online learning media might be caused by the Whatsapp group was a social media application that often used by people in daily life. Furthermore, the Whatsapp group is an inexpensive application, friendly user, and could write and send a message in real-time. This statement was in accordance with the research of Ahmad et al. and Suardika et al. who state that the Whatsapp group was simple, easy to use, and inexpensive application in the learning process (Ahmad, Zulfikar, and Hardiana 2020; Ketut Suardika et al. 2020).

On the other hand, several teachers about 15.09% used google classroom for their online learning. Google Classroom offers great features in the learning process that can be alternative media for online learning (Kumar et al. 2020). But unfortunately, this platform was still unfamiliar in rural areas so that only some

teachers who known technology that used this platform. From these data, it could be concluded that the Whatsapp group was a learning media that was widely used in online learning during the covid-19 pandemic in rural areas because it was the easy to use and inexpensive application.

The school give me the facilitates in the online learning process

The online learning process in rural areas could run well if the facilities used were available. Therefore, in the second questionnaire, the participants were given the statement about whether they were given facilities from the school in the learning process. Figure 4 shows that 69.82% of elementary school teachers are agree (consist of 26.42% agree and 43.4% strongly agree) with the statement that they were facilitated by the school for online learning.
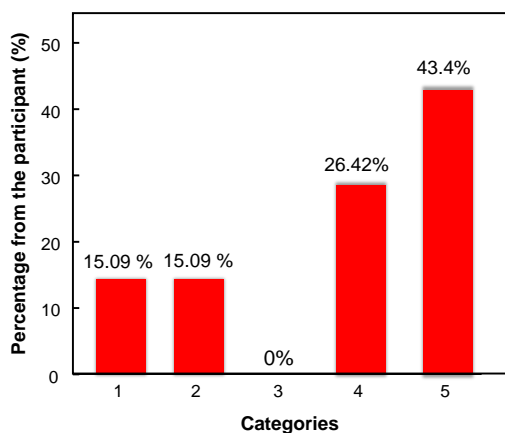
The facilities provided by the school could be in the form of internet bandwidth purchases. By providing internet bandwidth purchase incentives, teachers did not need to think about the costs required for online learning. This data showed that schools gave attention to online learning conducted by teachers.

Signal quality is my problem in implementing online learning

The Internet has an important role in online learning. Without the internet, online learning will not work well. In this questionnaire, the elementary school teachers were given a statement that the quality of the internet was their problem for online learning. The percentage of participants answer of the third statement was shown in figure 5.
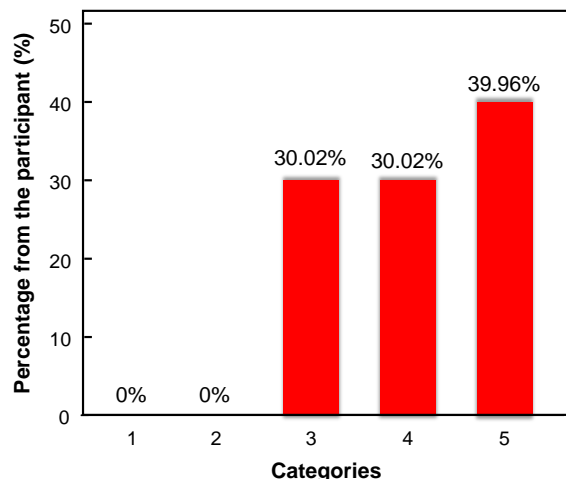

Figure 4. The percentage of participants answer the second statement.

Figure 5. The percentage of participants answer the third statement.

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From the data showed that, almost of the participant, about 69.98% agree with the statement and the other chose neutral. This data also showed that one of the main obstacles for online learning in rural areas was the internet access. It was similar to Budiyanto's research data which stated that only 48.3% of rural areas can enjoy internet infrastructures (Budiyanto et al. 2019).

During online learning, I often giving assignments instead of delivering course material

In the fourth questionnaire, the participants were given a statement about whether they often give the assignments instead of delivering course material. Figure 6 showed that 69.8% of participants are agree that they gave more assignments than the course material. This might occur because of the lack of knowledge about technology from rural teachers so the innovation of the learning was still low.
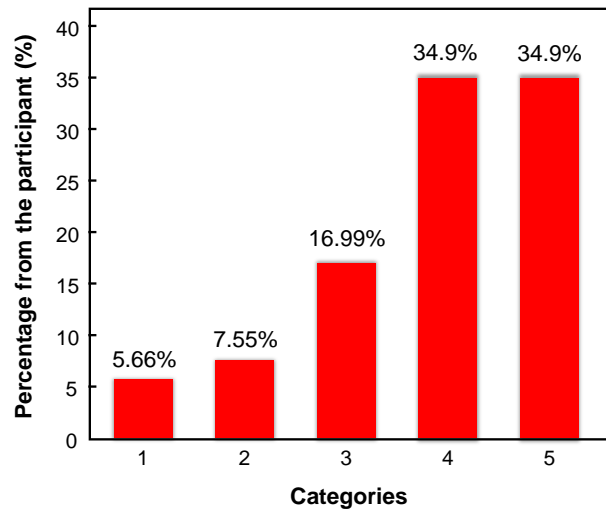

Figure 6. The percentage of participants answer the fourth statement.

During the covid-19 pandemic, innovation in the online learning process was important to make the learning process be more comfortable. If the teacher provided a comfortable atmosphere in the learning process, then students' motivation could increase (Jones, Olds, and Lisciandro 2019; Kintu, Zhu, and Kagambe 2017). Various ways can be done by increasing students' motivation in online learning such as creating interesting multimedia, online quizzes and others (Iasha et al. 2019). But in fact, teachers' learning innovation in rural areas was still low so the more assignments were given through Whatsapp groups.

Students already have enough facilities in online learning during the covid-19 pandemic

Besides the teachers, students also need facilities in the online learning process. In the fifth questionnaire, the participants were given a statement about whether the students already have enough facilities in online learning. The data was taken by the teacher's opinion about students' facilities. Figure 7 showed that 54.72% of teachers disagree with the statement. It might occur because not all students in rural areas have smartphones or notebooks so that online learning is less optimal. Some students still depended on parents in using smartphones or notebooks because these items were still considered expensive for some students. As a result, the learning process was more focused on giving assignment so it made the learning process easier.
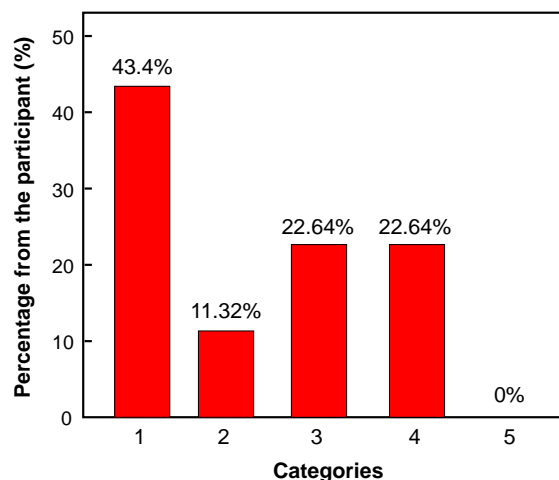

Figure 7. The percentage of participants answer the fifth statement.

On the other hand, internet bandwidth was also become the problem that was owned by students. Not all students can afford to buy a lot of internet bandwidth. This was caused by the economy in rural areas were still low especially during the covid-19 pandemic which made the economic downturn. Moreover, there was no assistance from schools because of limited funds. From these data, it could be concluded that students in rural areas still lacked in online learning facilities.

D. Conclusion

The situation of the online learning process in rural areas during the covid-19 pandemic has been investigated in this research. The research was conducted in Purwosari sub-district, Bojonegoro district, East Java with 53 of elementary school teachers as the participant. The instrument that was used to collect the data was online questionnaires. Online questionnaires consist of five statements that illustrated the online learning process in rural areas. This research showed some findings of the

online learning process in rural areas. First, the Whatsapp group was the famous platform for online learning. Besides, Google classroom was also used by a small proportion of teachers. Second, the teachers have been facilitated by the school in online learning in the form of internet bandwidth purchasing. On the other hand, internet access, learning innovation, and students' facilities for online learning become obstacles in the online learning in rural areas

References

Ahmad, S., T. Zulfikar, and F. Hardiana. 2020. "The Use of Social Media Whatsapp among English Education Students for Solving Thesis Writing Problems." *Humanities and Social Sciences Reviews* 8(3):447–55.

Budiyanto, S., M. Jamil, and F. Rahayu. 2019. "Feasibility Analysis of the Application of Project Loon as an Equitable Effort for Communication Infrastructure Development in Indonesia." *InComTech* 9(2):61–76.

CNN. 2020. "Kemendikbud Buat Skenario Belajar Di Rumah Sampai Akhir 2020." *CNN Indonesia*. Retrieved May 25, 2020.

Iasha, Vina, Reza Rachmadtullah, Ajat Sudrajat, and Dewi Hartanti. 2019. "The Impact Interactive Learning Media on The Learning Outcomes of Fifth Grade Social Science Knowledge in Elementary School." *First International Conference on Technology and Educational Science*.

Jones, Angela, Anita Olds, and Joanne G. Lisciandro. 2019. *Transitioning Students in Higher Education: Philosophy, Pedagogy and Practice*. Routledge.

Ketut Suardika, I., Alberth, Mursalim, Siam, L. Suhartini, and Nikolaus Pasassung. 2020. "Using WhatsApp for Teaching a Course on the Education Profession: Presence, Community and Learning." *International Journal of Mobile and Blended Learning* 12(1):17–32.

Kintu, Mugenyi Justice, Chang Zhu, and Edmond Kagambe. 2017. "Blended Learning Effectiveness: The Relationship between Student Characteristics, Design Features and Outcomes." *International Journal of Educational Technology in Higher Education* 14(1):7.

Kumar, J. A., B. Bervell, and S. Osman. 2020. "Google Classroom: Insights from Malaysian Higher Education Students' and Instructors' Experiences." *Education and Information Technologies*.

Madiawati, Hanny. 2019. "Broadband Access Using Ethernet over PDH Based Microwave Radio Link for Rural Area." Pp. 1–5 in *2019 IEEE 5th International Conference on Wireless and Telematics (ICWT)*. IEEE.

Malczyk, Benjamin R. 2019. "Introducing Social Work to HyFlex Blended Learning: A Student-Centered Approach." *Journal of Teaching in Social Work* 39(4–5):414–28.

Murtikusuma, R. P., Hobri, A. Fatahillah, S. Hussen, R. R. Prasetyo, and M. A. Alfarisi. 2019. "Development of Blended Learning Based on Google

Classroom with Osing Culture Theme in Mathematics Learning." *Journal of Physics: Conference Series* 1165:12017.

Sabah, Nasser M. 2019. "Motivation Factors and Barriers to the Continuous Use of Blended Learning Approach Using Moodle: Students' Perceptions and Individual Differences." *Behaviour & Information Technology* 1–24.

Setiawan, Bramianto, and Vina Iasha. 2020. "Corona Virus Disease 2019: The Perspective Opinion From Pre-Service Elementary Education Teacher." *Education, Sustainability & Society* 3(2):33–36.

Setiawan, Bramianto, Ricky Dwi Septianto, Dadang Suhendra, and Ferry Iskandar. 2017. "Measurement of 3-Axis Magnetic Fields Induced by Current Wires Using a Smartphone in Magnetostatics Experiments." *Physics Education* 52(6).

Setiawan, Sigit, and Andi Suhandi. 2020. "The Usage Of Kit-For-Kids In Discovery Learning Model To Improve The Understanding Of Science Teaching Materials On Elementary School Students." *JPsd (Jurnal Pendidikan Sekolah Dasar)* 6(1):43–54.

Stoetzel, Lindsay, and Stephanie Shedrow. 2020. "Coaching Our Coaches: How Online Learning Can Address the Gap in Preparing K-12 Instructional Coaches." *Teaching and Teacher Education* 88:102959.

Sulfemi, Wahyu Bagja, and Yasinta Kamalia. 2020. "JIGSAW Cooperative Learning Model Using Audiovisual Media To Improve Learning Outcomes." *JPsd (Jurnal Pendidikan Sekolah Dasar)* 6(1):30–42.

Sunaryo, Ayo, Tati Narawati, Juju Masunah, and Trianti Nugraheni. 2020. "Concept Of Children's Dance Composition Based Traditional Games In Elementary School." *JPsd (Jurnal Pendidikan Sekolah Dasar)* 6(1):100–113.

Teo, Timothy, Mingming Zhou, Andy Chun Wai Fan, and Fang Huang. 2019. "Factors That Influence University Students' Intention to Use Moodle: A Study in Macau." *Educational Technology Research and Development* 67(3):749–66.

Tesar, Marek. 2020. "Towards a Post-Covid-19 'New Normality?': Physical and Social Distancing, the Move to Online and Higher Education.".