



Obstacles of Online Learning During the Covid-19 Pandemic Among Science Teachers in Palu City

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Abstract

This study aims to describe the obstacles to online learning during the pandemic Covid-19 among science teachers in Palu City. This research is a qualitative descriptive study using a survey method which was conducted in person and online. Primary data collection was done by interview, distributing questionnaires totaling 25 questions online to respondents. Respondents were 9 science teachers in 3 junior high schools in Palu Barat sub-district who were more than 25 years old with a bachelor's degree. The results showed that overall there were 4 items that did not hinder or did not become an obstacle in online learning for teachers, 12 statement items were considered inhibiting by teachers and 9 items were considered very inhibiting by teachers, the difficulty faced by teachers was the difficulty of evaluating practicum activities online, while some subjects in science lessons require practicum activities, this makes the teacher improvise in practicum activities and ask students to do simple independent practicums, but direct practicum is still considered better because the teacher can directly monitor student activities.

Keywords: online learning, pandemic period, science teacher

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INTRODUCTION

The case of the spread of the Covid-19 pandemic which began to be heard from the Wuhan area (Lee, 2020) became the beginning of the spread of concern throughout the world over the spread of the Corona virus. The Palu City Government decided to implement work from home (WFH). Learning is also required online. This is done to prevent widespread transmission due to massive interactions. Physical distancing is one of the hopeful strategies to break the chain of transmission of this disease. The changes forced by Covid-19 are so fast that it makes preparations to deal with various changes not optimal. With the existence of the Corona virus, many countries have set a lock-down, with this covid-19 schools are closed and online learning is carried out as an effort to stop the spread of Covid-19 (Putria et al., 2020). The Ministry of Education and Culture issued a teaching and learning policy at all levels of education ranging from elementary, middle and even higher education levels which has been regulated in Permendikbud Number 3 of 2020 concerning the prevention of COVID-19 in Education Units and Number 36926/MPK.A/HK. /2020 on Distance Learning by utilizing technology as a learning medium (Sari et al., 2021).

Online learning is a new way in the teaching and learning process that utilizes electronic devices, especially the internet in the delivery of learning. Online learning, completely dependent on internet network access. According to Imania (2019) online learning is a form of delivering conventional learning that is poured in digital format via the internet. The applications used in online learning are WhatsApp, Zoom, GoogleMeet,

Classroom (Aini and Riyantomo 2019:228). Online learning is learning that is carried out using the internet network through devices such as smartphones, laptops or computers that can allow the learning process to occur (Sadikin and Hamidah 2020: 216). Online learning uses a platform to facilitate the teaching and learning process even though it is carried out remotely (Handarini & Wulandari, 2020).

Various terms regarding e-learning are also often encountered in the world of learning, including: on-line learning, internet-enabled, virtual learning, and web-based learning. The purpose of using e-learning as a learning system is to improve the quality of learning, to change the teaching culture, to change a passive learning culture to an active learning culture to form independent learning, to expand the basis and opportunities for learning by the community, to develop and expand new learning products and services (Sari, 2017).

Online learning is learning that completely depends on internet network access, this is because the entire process of implementing learning is carried out through internet information technology (Rigianti, 2020). Online learning can be done by combining several types of learning resources such as documents, images, videos, audio in learning. The learning materials can be used by students by viewing or reading. Learning resources like this are the main capital in developing online learning. Because, if the teacher packs learning as attractive as possible and according to the characteristics of students, then the learning objectives can be achieved even in online activities.

The situation that has arisen due to the Covid-19 pandemic requires lecturers to use all available media to support online learning. El Azar (2020) says, as we educators struggle with new ways to communicate with students and students away from classrooms and lecture halls. Various applications with various features can be the choice of lecturers in carrying out online learning (Abidah, et.al. 2020; Zhou, et.al. 2020).

The ineffectiveness of the implementation of online learning can be caused by several factors, namely the first is the unpreparedness of teachers to face online learning so that teachers experience difficulties in teaching the online system. Both facilities and infrastructure in online learning are less supportive, especially the facilities and infrastructure owned by students so that online learning cannot run well. The three economic conditions of parents of students are not the same, there are parents who are able and there are also parents of students who are less able (Darlan, 2020). Therefore, it is necessary to improve online implementation, especially in planning, process, and evaluation in order to meet the quality standards of online learning implementation recommended by the government.

Based on the description above, considering the importance of disclosing in depth and comprehensively related to online learning, it is deemed necessary to carry out research with the title: Constraints of Online Learning During the Covid-19 Pandemic Among Science Teachers in Palu City, this research was conducted in order to find out the obstacles to implementing science learning online at Palu City Middle School.

METHOD

This research is a qualitative descriptive study using a survey method which was conducted in person and online. Primary data collection was carried out by interviewing, distributing online questionnaires to natural science teacher respondents at the Palu Barat sub-district school who had experienced the impact of the Covid-19 pandemic. In addition, supporting data is secondary data from documents, articles or news related to online learning during *Covid-19*. The respondents of this study amounted to 9 teachers who have an age range of more than 25 years with the latest education being S1 in the city of Palu, namely in the West Palu area. The distribution of respondents is science teachers grade 7 to grade 9 then the data obtained through filling in the questions distributed to all respondents

Research instrument in the form of a questionnaire consisting of 25 question items. Strongly disagree answers get 1 point, disagree 2, Agree 3 and strongly agree answers get 4 points.

Data analysis in qualitative research uses descriptive data analysis techniques in analyzing research data obtained from the process of systematically searching and compiling data obtained from observations, interviews, questionnaires, other data and the field. The results of the analysis in the study show that, overall there are 4 items that do not hinder or do not become obstacles in online learning for teachers, 12 statement items are considered inhibiting by teachers and 9 items are considered very inhibiting by teachers.

RESULTS AND DISCUSSION

The results of observations related to junior high schools in North Palu, from the data obtained there were 3 schools at the junior high school level in North Palu. However, during the implementation process there were still some junior high schools that were not listed on the internet page. Thus, the sample taken is only 3 schools. Of the 3 schools, 1 school which is a private school, namely SMP Karya Bhakti Mamboro, applies offline learning. The implementation of this research began on August 5, 2021 to coordinate and observe. This was followed by the process of distributing research instruments or questionnaires to each school that was used as the research sample. The activity was carried out on August 10, 2021 and on August 12, 2021, the research team controlled filling out the questionnaires that had been distributed. The last activity was carried out with data collection, namely on August 16, 2021.

This study conducted interviews with teachers during the observation period to determine the condition of the school. The North Palu region has 3 junior high schools (SMP) based on data from the Ministry of Education and Culture reference on the <https://reference.data.kemdikbud.go.id/> page. Two schools are public schools while the other is a private school. Karya bhakti SMP which is a public school does not apply online learning but learning is done offline, meaning that students come to school and take assignments, modules or worksheets that become study materials and will be handed back according to the agreed time, so that in the research questionnaire for educational purposes given only to SMP Negeri 18 Palu and SMP Negeri 20 Palu.

This study found that the internet network at the location of residence is not an obstacle in online learning, this is because the average student attending school in the research location lives in the area around the school, while the internet network in the research area is quite good and stable. The ability of teachers to operate digital devices, and the preparation of digital teaching materials, including supporting digital practicum activities, is also considered not to be an obstacle in online learning, this is because teachers are accustomed to compiling digital learning tools and digital tools for the teaching and learning process during the teaching and learning process. approximately 2 years, due to the demands of the situation and the environment during the pandemic. This is in line with the opinion of Chalim & Anwas (2018) which says that the environment plays a very important role in creating habits, using and utilizing the internet for education. The obstacles to online learning are: Device Limitations and Internet Access. According to research conducted by Andi Anugrahana, the obstacles faced in the implementation of online learning are the limitations of devices and internet access. Some children who do not have facilities such as cellphones and are constrained in sending assignments because the signal does not support so that when the learning process takes place teachers, students, and parents experience obstacles. The most basic obstacle faced is the network problem (Anugrahana 2020: 286). Lack of access to technology or fast and reliable internet access is felt by students in rural areas and from disadvantaged families. Lack of access to technology or good internet connectivity is an obstacle to continuing to learn, especially for students from underprivileged families (Firdaus 2020:221).

Learning carried out in elementary schools also uses online/distance learning through parental guidance (Dewi, 2020). Parental supervision and assistance is still considered lacking during online learning activities, while the role of parents is very large in the online learning process. Many parents are less active in subject groups to monitor the course of

science learning. Parents also tend to let students learn on their own and less monitor the assignments given. Parents' understanding of learning materials is still lacking. The obstacles that arise are because parents have their own busyness to take care of work. Another thing that can also be a trigger is because during the pandemic all subjects are taught online not just science lessons, so parents will be overwhelmed to balance time between work and full supervision of children's learning activities. This is in line with the opinion of Astuti & Harun (2020) which states that one of the challenges for parents is to allocate time to accompany students and carry out their work responsibilities. Another thing that becomes an obstacle for teachers during online learning is the lack of readiness of students to study independently at home. The internal motivation of students to study online is also lacking. Yulistiawati (2019) stated that motivation is not only important because it is a factor that causes learning, but also facilitates learning and learning outcomes. Students are also still not aware of the platforms used for online learning. This is certainly an obstacle because the platform used can be likened to a classroom for offline learning. The factors according to (Kurniawan et al, 2017), which will affect the level of student success in learning are internal factors and external factors, both that factor d can be an obstacle or supporter of student learning. Because these two factors have a huge influence on the success of learning that can be achieved. Parents' attention and motivation can improve children's learning mood. When children are passionate about learning, this can develop children's psychology (Sun'iyah, 2020).

Teacher required to be able to master and be creative with technology in this digital era so that online learning does not become monotonous and can increase students' enthusiasm for learning until the pandemic ends (Putria et al., 2020) The behavior and development of students in online learning is difficult to monitor by teachers, this is also an obstacle felt by the teachers in the research location. It will be easier to monitor student progress if communication runs smoothly. Another thing that is also an obstacle is the absorption of material by students is less than in direct learning in the classroom. In online learning the teacher cannot directly see the conditions or processes of students in learning. This causes the teacher to only be able to see the progress of students through the assignments given or only face to face online, and communication is not as good as if face to face. Agung Mahardini (2020) revealed that both students and teachers prefer learning that takes place in class because it is considered more effective in delivering material and communication. This is because when the children are busy playing, the children are asked by their parents to pursue assignments from the teacher, or when the children are doing their homework, the parents even ask the children to help with the housework. Situations like this disrupt the child's thinking patterns, causing them to cry often (Jatira & Neviyarni, 2021) . During online learning, communication between parents and teachers is very much needed. Parents must also ensure that the tasks given by the teacher to their children have been done or not (Rahmania et al., 2021).

Another factor that can affect a child's psychology is child trauma, where there are memories that are very memorable or disappointing, children feel alone when learning online is different when students do face-to-face learning at school (Rosdiana & Hastutiningtyas, 2021). i.e., Stacked Tasks. In the implementation of online learning the teacher experiences anxiety such as difficulty understanding the material, doing tasks and worrying about the next piling up task. (Oktawirawan 2020:210). Another difficulty faced by teachers is the difficulty of evaluating practicum activities online, while some subjects in science lessons require practicum activities, this makes teachers improvise in practicum activities and ask students to do simple independent practicums, but direct practicum is still considered better because the teacher can directly monitor student activities.

CONCLUSION

From the results of the research that has been carried out for 4 days, data is obtained showing that most teachers say that online learning experiences many obstacles. Of the 3

schools that were used as research samples, one of them was a private school, namely SMP Karya Bhakti Mambo. The application of learning during the pandemic period at the school is an offline process with the method of students picking up and delivering their assignments to school.

RECOMMENDATION

Based on the presentation of the research data, there are several recommendations, including (1) teachers need to improve competence in online teaching, it is necessary to take part in various trainings in order to develop and apply virtual-based learning media; (2) Government as Policy Maker need to facilitate the online learning process, the government needs to provide data package quotas to students and improve the internet network in schools that have not been reached by the internet; (3) Campus Academics need to make breakthroughs and ideas in developing and creating virtual-based learning innovations to then be applied to online learning; and (4) other researchers need to conduct further research to find out the development of online learning during the new normal, or conduct development research as input for learning innovations during the covid-19 pandemic..

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